

THE
Chicago Medical Journal.

A MONTHLY RECORD OF

Medicine, Surgery and the Collateral Sciences.

EDITED BY J. ADAMS ALLEN, M.D., LL.D.; AND WALTER HAY, M.D.

VOL. XXX. — APRIL, 1873. — No. 4.

Original Communications.

ARTICLE I.—*Civil Malpractice. A Report presented to the Military Tract Medical Society, at its Fifteenth Semi-Annual Meeting, Jan. 14, 1873.* By M. A. McCLELLAND, M.D., Knoxville, Ill.

(Concluded from page 145.)

The reduction being effected, means must be provided to keep up extension and counter-extension, and also means to prevent lateral and antero-posterior curvature. With the exceptions of fractures of the lower extremities, these ends are accomplished by the use of the splints alone. In fractures of the lower extremities, especially of the femur, we are, except in certain cases, which will be indicated, obliged to use other means for the prevention of shortening. In fractures of the shaft and upper end of the femur, there has been a difference of opinion as to what position the limb should be kept in during the process of repair. Dr. Ashurst in his remarks upon the subject, says: "I have no hesitation in expressing my preference for the treatment of these injuries by means of the *straight position with moderate extension*, whenever that mode of treatment is applicable. In cases of *impacted fracture*, extension is undesirable, and such cases may be treated by position alone, the

joint being fixed by means of the long splint, in any of its varieties, or simply supported by means of heavy sand bags placed on either side of the injured member. If the fracture be *unimpacted*, the same treatment should be employed, with the addition of moderate extension. *Counter-extension* may be made by means of a perineal band fastened to the head of the bed, or, which is usually sufficient, simply by elevating the foot of the bed, thus utilizing the weight of the body itself as the counter-extending force. It is right to say that there are certain cases, especially of intra-capsular fracture, in old persons, in which *no apparatus* can be borne, and in which even confinement to bed is fraught with dangerous consequences; under such circumstances the injured limb should be simply laid across pillows as recommended by Sir Astley Cooper, until the pain and inflammation which attend the injury have subsided, the patient being then allowed to get up in a chair or on crutches; bony union, under such circumstances, cannot be hoped for, and the *general* rather than the *local* condition of the patient should be the object of attention." *Princip. and Prac. Surg.*, 259-60.

For the dangers attending an excess of the extending and counter-extending force, the reader will profit by examining the Transactions of the last (May, 1872,) meeting of the American Medical Association, Surgical section. I abridge:—"Dr. Sayre, of New York, thought that the treatment by extension and counter-extension was being carried too far. Every ounce of force applied beyond that necessary to bring the fragments into exact adjustment was injurious; every ounce short of this was insufficient. Dr. Mussey, of Cincinnati, had a case under extension six weeks, with no union. He then took off extension, and union soon followed. A delegate from South Carolina, thought non-union scarcely ever due to over-extension. Non-union was as frequent under the long splint as under the weight and pulley—perhaps more so. Dr. E. M. Moore, of Rochester, thought the weight and pulley gave better results than the straight splint of Desault, but we had become so anxious to avoid all shortening that we often put on too much weight. In transverse fractures, if the limb was kept at its full length, the fragments, though at first in contact, would soon become slightly separated by the absorption of the spicula of bone projecting from their ends;

and non-union would ensue. Dr. A. C. Post, of New York, thought the limb might be lengthened by too much extension, even by extension not sufficient to cause discomfort. Examining and measuring all the compound fractures of the thigh under treatment in the Washington Hospitals, toward the close of the war, (where he found Buck's extension giving incomparably the best results), he had discovered one case of slight elongation in an adult. Dr. Gurdon Buck, of New York, claimed for this method, (extension by adhesive plaster, pulley and weight, counter-extension by raising the foot of the bed), which bore his name, that it offered the most efficient means of maintaining uninterrupted extension without discomfort to the patient. It was especially adapted to children. In all his experience but one case of non-union was fairly attributable to over-extension; this was the case of a healthy adult, and the surgeon having the case in charge had, during the whole treatment (ten weeks), kept on a weight of more than twenty pounds. The case had suggested a rule which he had since followed, not to maintain a heavy weight, with hope of securing an unshortened limb, beyond the first fortnight. Dr. Gregory, of Mo., thought that elongation of the limb in young subjects, where the fracture was in the lower third of the femur, might be readily explained by increased growth of the epiphysis from fluxion to the part. Non-union might be due to many other causes, some of them obscure. The obstinacy of Dr. Buck's case would seem to imply that there was some other influence at work to prevent repair than the twenty pounds extension." *Medical Record*, June 15, 1872.

"It is only in fractures of processes, that lengthening of fractured bones would be complained of. The muscular contraction would tend to draw the process away from the shaft or body of the bone, hence the necessity of so dressing the part that the fragments would be kept in as near apposition as possible. For this reason, in fractures of the olecranon, the parts should be kept in the straight position, else by the action of the triceps muscle, the process would be carried so far from the ulna, that the power of extension would be thereafter lost. The great danger to be apprehended in fractures of this joint is ankylosis, and this will occur irrespective of the position in which the arm is dressed." *Hamilton*, 310.

"The tendon of the biceps and facia brachialis in front, and tendon of triceps behind, are all more or less involved in the inflammatory action, set up by fractures in this region, becoming thickened and tense, and more or less adherent to each other and adjoining tissues. Stiffness of the joint is a necessary sequence." *Smith's Op. Surg.*, vol. 1, p. 761.

To a man with a broken thigh or leg, a comfortable bed to lie upon is of the first importance. "The practitioner who fails to give the proper instruction respecting it, is guilty of gross dereliction of duty." *Gross' Surgery*, vol. 1, p. 865. On the same subject, Hamilton remarks, when speaking of fractures of the thigh, (*Frac. and Dis.*, 430): "Where some form of fracture bed cannot be procured, and the patient is compelled to lie on a common cot bedstead, or a common post bedstead, or upon the floor, I cannot think the surgeon ought to be held in any degree responsible for the result." H. H. Smith, (*Op. Surg.*, vol. 1, p. 606,) is equally decided in respect to this matter. He says: "If the patient has a fractured thigh, leg, or cranium, or any injury by which he is likely to be confined to his bed for some days or weeks, the bed upon which he is to lie, must be prepared for that purpose."

After the reduction of the fracture and the application of those means for the retention of the broken bones in apposition, attention must be given every day or twice a day to the accidents that may follow the injury or the dressing. Paralysis of the bladder, especially in elderly patients, demands attention. Erysipelas, delirium tremens, and tetanus, may also claim his care. The most frequent accidents, however, are bedsores and ulcerations from undue or too long continued pressure. Ulceration is particularly apt to occur upon the heel or upon the internal or external malleolus. This trouble is to be obviated by shifting the pressure to some other part of the limb. The ulceration upon the heel can generally be entirely obviated by a bladder, distended with air or water, placed beneath the heel, and changed as often as necessary, or by a wide rubber band passing beneath the limb and attached to the upper edge of the splints, or even by a piece of cloth attached in the same manner.

COMPLICATIONS. "Implication of the joint in the line of fracture will very often give rise to a certain amount of stiffness if not

absolute ankylosis after recovery, or in a strumous constitution may cause disorganization of the articulation, and thus eventually render amputation imperative. Chorea, affecting a limb which is the seat of a fracture, is a very serious complication. Fractures in a paralyzed limb unite; danger to be apprehended here, is from sloughing. Tardy or delayed union of bones is occasionally met with, and is, probably, more often dependent on constitutional than on local causes. Sometimes it appears to result from mere debility and depression without the existence of any positive cachexia. Occasionally, a broken bone does not unite at all, or unites only through the medium of fibrous or ligamentous bands, or, having united, becomes again separated by the absorption and softening of the callus. In some bones; indeed, as in the patella, bony union almost never occurs. So also fractures of the neck of the femur, within the capsule. Among the causes of non-union may be mentioned, general impairment of health, and various cachectic conditions and diatheses, such as scurvy, phthisis, rickets, syphilis, or cancer." *Ashurst, Princip. and Prac. Surg.*

In respect to union in the case of paralyzed limbs, I think, when it takes place, it certainly must be somewhat slower than usual. It is an accepted doctrine, that the nutrition in a paralyzed part is generally if not always impaired, and as a consequence repair must progress slowly. Nutrition might be so much impaired that union would not take place at all. Mr. Travers reports a case in which a "patient had a fracture in the arm and another in the leg, complicated with an injury of the spine which palsied the lower half of the body. The broken humerus readily united, but the tibia and fibula refused to heal." *Gross' Surg., vol. 1, 3rd ed., p. 882.*

In suits for malpractice in the treatment of fractures of the lower extremity, one of the allegations is, generally, "shortening." "With regard to the prognosis of fractures through the shaft of the femur, I have no hesitation in saying that I have never seen a perfect cure, either in my own practice or in that of others; by this I mean, that I have never seen a cure without shortening. * * * * * I have never seen less shortening than a quarter of an inch after fracture of the thigh even in children; and I consider a shortening of from half an inch to an inch, a satisfactory result in adults." *Ashurst's Surg., 260.*

Velpeau says, that "after fractures of the femur there is no limping unless the shortening exceeds three-quarters of an inch; and the same is true if the shortening occurs in the tibia."

Hamilton, says, (*Princip. and Prac. of Surg.*, 292, 308): "When, in consequence of displacement, an overlapping continues, the average amount of shortening, in adults, in simple fractures, will be about three-quarters of an inch, and ranging from one-quarter of an inch to one inch and a half; nor will a greater amount of shortening necessarily imply unskillful management. With children, the average amount of shortening is probably from one-quarter to half an inch. Compound fractures, including nearly all gunshot fractures, unite generally with a shortening of from one and a half to three inches or more. In fractures of the tibia and fibula, which are mostly oblique, union generally takes place with a shortening of half an inch."

Among eminent surgeons who claim to have cured fractures of the femur without shortening, may be mentioned Amesbury, South, Hunt, and Gamgee, of England; Dorsey, of Philadelphia; and Scott, of Montreal. In regard to these, Prof. Hamilton holds the following language: "It is never a pleasant duty to call in question the accuracy of another's statements as to what he has himself alone seen and done. The circumstances that would justify such an expression of scepticism, where the witnesses, as in this case, are presumed to be intelligent and honest men, must be extraordinary. Such, however, I conceive to be the circumstances in this instance. It is certainly very extraordinary that a few gentlemen of acknowledged skill, but whose means and appliances are concealed from no one, are able to do what nearly the whole world besides, with the same means, acknowledges itself unable to accomplish. Such is the fact, nevertheless; and our lack of faith in their testimony is only a necessary result of our experience, and of the experience of the vast majority of practical surgeons, as opposed to theirs."

In the same connection, Prof. Hamilton gives the names of the many eminent surgeons who admit shortening as a necessary sequence of fractures of the femur. Among these names we find Hippocrates, Celsus, Avicenna, Scultetus, Chelius, John Bell, Benj. Bell, Nelaton, Malgaigne, Maclise, Holthouse, Mott, Knight, Detmold, J. Mason Warren, and Lente. Certainly the weight of

authority is conclusive. The writer's experience gives seven cases, three of the thigh and four of the leg, in all of which there was shortening.

"It should be borne in mind, that fractured limbs have been released from splints, and other dressings, at the proper time, of proper length and free from deformity, which, nevertheless, have soon become both shortened and bent." *Liston's Elements of Surg., Am. ed.*, 555; also, *Miller's Princip. of Surg.*, 497.

The requisite length of confinement is regulated by the age of the patient, extent of injury, and use to which the part is to be afterward put. In fractures of the lower extremity the time will vary from four to eight weeks, and the limb should not be used for several weeks more.

The following rules for the government of the surgeon in treating fractures, by Dr. Prince, of Jacksonville, are worthy of especial consideration:

"1. Apprise the patient and friends of the difficulties of the case and the uncertainty of a perfect result, whatever skill and attention may be exercised.

"2. Instruct the patient and nurses in the working of the machinery, and direct them to give him immediate notice of anything giving way or seeming to go wrong.

"3. Caution the patient to be careful of the limb after the chief support is taken off, and let him apply a starched bandage or other support to the limb, to be worn long after the patient goes about.

"4. Let him be *sure* that he has *disinterested witnesses* to what he may say and do, so that if any accident or unfavorable result occurs, he may be able to prove his points." *Chicago Med. Journal*, May, 1860.

In respect to deformity, it cannot, frequently, be avoided. Especially is this so in dislocations, when one or more of the articular eminences are fractured at the same time. Here, the resulting swelling forbids the discovery of the complication, and indeed should it be discovered, any known mode of dressing would but illy keep the fractured bones in apposition. In dislocations of the clavicle, either of its acromial or sternal ends,

deformity is a necessary sequence. So also, fractures of this bone never unite without some deformity. In dislocations of the humerus, the head of the bone may be displaced after perfect reduction, by gradual muscular contraction.

AMPUTATIONS.

In respect to amputations there is much error prevalent. The people suppose that whoever has performed an operation of this character, must necessarily be an eminent surgeon. The profession, on the other hand, is of opinion that almost any one can perform the operation. It is here that errors in judgment should be followed by punishment, if ever. It is not the mechanical skill that would be called in question, as much as the decision in respect to the necessity for the operation. To determine questions on this point requires the highest degree of surgical skill and judgment.

The necessity being answered in the affirmative, we have then to determine at what time the operation should be performed. During "shock," or the period of reaction? Consideration of this question is of the greatest moment to the patient. "Postpone a resort to the knife until there is satisfactory evidence of reaction; until, in a word, warmth and color return to the surface, the pulse beats vigorously at the wrist, and the sufferer regains, in some degree, his consciousness and courage. On the other hand, care is taken not to wait until the part or system are assailed by inflammation, which, under such circumstances, often extends with frightful rapidity, placing the case, perhaps literally, beyond the resources of surgery in the course of a few hours. There is, therefore, a time when interference must be avoided, not less than when it must be courted. The limits of these periods are not always well defined, and hence must be left, in each individual case, to the judgment of the attendant." *Gross' Surg.*, vol. 1, p. 498.

"I am now prepared to affirm, that the period of reaction, or the primary period, is the best point of time for amputation, and that the immediate or period of shock, is not the best, but that, on the contrary, it is an imminently dangerous period; and yet I would make an amputation then, if the patient were bleeding to death, and I could not tie the arteries, or if there were spicula of bone

projecting into the nerves and producing spasms; or, if the limb were nearly severed by a cannon ball." *Hamilton, Lecture on Amputations; Med. Record, vol. 1, p. 330.* See also, *Pennsylvania Hospital Reports, vol. 1, p. 149.*

It will be seen from the foregoing, that "skill" will not be shown, alone, in the mere operation of removing the limb, but underlying and preceding the operation there are questions to be determined of vastly more importance. Nor are the questions just reviewed the only ones. Of no less importance is the question, At what point shall the operation be performed? The older surgeons had points, which they termed "points of election." "As these points have been so frequently changed, indeed, never fully established, modern surgery has formulated a rule upon which to declare the 'place of election.' It is this: inasmuch as the fatality following amputations diminishes as we get farther and farther away from the body, the practice now is very generally adopted, to amputate at that point at which we can save the most of the limb." This rule is *not*, however, applicable to amputations a few inches below the knee; here the "point of election" is the knee joint.

Regard is also had to the method, whether by the circular or flap operation. This is not of so much importance, good results depending more upon the subsequent treatment. As to this, the same general rules applicable to fractures and dislocations are appropriate. The resulting hemorrhage will need the surgeon's especial care.

How frequently should visits be made the patient? Each case will be a law unto itself. The responsibility rests upon the surgeon, and he should make just so many as his judgment dictates, uninfluenced by any inuendoes by the patient or his friends, or else demand that he be released from a responsibility he should not have been asked to assume.

What conclusions may be deduced from these judicial and medical views of "skill" and "negligence"?

Although no surgeon, however eminent, is exempt from the danger of suits from ungrateful patients, the law is for the surgeon's

protection as well as for the patient's. No gentleman of this Society need dread to have his professional acts investigated, if he can show that he has acted in good faith, conducting his treatment to the best of his ability; thus far the law is with him. We need nothing more to make our protection perfect, than the enactment of some statute, like that proposed for New York, which will require the plaintiff to secure us against all loss, in case he does not sustain his suit. We should also be permitted to have one expert on the jury, and, too, there should be some way in which the professional standing of the prosecuting witness could be investigated, to the end that such nonsense as that given in the case of *Haire v. Reese*—wherein the plaintiff's witness gave it as his opinion, "that the head of the femur might be 'crepitated' by absorption,"—may not continue to go to juries as sound medical evidence.

Under no circumstances should we compromise such suits. We owe it to ourselves, we owe it to our profession, we owe it to the public whom we serve, to let the matter be tried by the strict letter of the law, and thus vindicate the honor of our profession.

BIBLIOGRAPHY.

Wharton and Stille's Medical Jurisprudence, 2 vols., 3rd ed. Vol. 1—A Treatise on Mental Unsoundness, embracing a general view of Psychological Law. Vol. 2—embracing the topics of Sex, Poisons, Wounds, Identity, Malpractice, etc.

Beck's Medical Jurisprudence, 2 large vols.; embracing all the above subjects except Malpractice. Especially full on Malingering.

Ray's Medical Jurisprudence of Insanity. No better authority on the subject published.

Elwell's Malpractice is the only work yet published upon this specialty. He also discusses the subjects of Insanity and Medical Evidence.

Prof. Stephen Smith, of New York, has been collecting data for a treatise on Malpractice. This, when published, will undoubtedly be the best on the subject.

Ordranax's Jurisprudence of Medicine in its relations to the Law of Contracts, Torts, and Evidence, is to be consulted by those wishing to know what rights they have in the matters treated of. It contains the statutory enactments relating to the practice of medicine in the States of Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, New Jersey, New York, Ohio, South Carolina, Texas, Vermont, Virginia, Wisconsin, and District of Columbia. Also, Malpractice and the Jurisprudence of Phar-

macy, including the Legal Rights of Physician, Druggist and Patient, in Prescriptions.

Dean's Medical Jurisprudence, considers the relations of—1, Sex; 2, Injuries affecting the organization; 3, Questions arising out of disease; 4, Deceptive Practices, feigning disease; 5, Age, Identity, Life Assurance, and Medical Evidence.

Of Foreign Treatises, Dr. Taylor's Medical Jurisprudence, edited by Penrose, is good authority. He discusses Medical Evidence, Personal Injuries of a Criminal Character, Pregnancy, Infanticide, Legitimacy, Insanity, and Life Insurance.

Dr. Guy's Forensic Medicine, considers questions in respect to Personal Identity, Age, Sex, Impotency, Rape, Pregnancy, Delivery, Foeticide, Infanticide, Legitimacy, Life Assurance, Feigned Diseases, Insanity, Medico-Legal Inspection of the Dead, and Toxicology.

Caspar's Forensic Medicine, in 4 vols., translated and published by the New Sydenham Society, is to be consulted on any of the subjects treated of by the above mentioned authors.

ARTICLE II.—*Removal of External Tumors.* By J. E. NICHOLS, M.D., Osage, Mitchell Co., Iowa.

On page 509 of the last volume of the JOURNAL there is an account of Michel's process for removing external tumors.

Determine as we may, the most dignified of our profession find human nature too weak to avoid an occasional step in the direction of charlatan practice. Without precisely knowing why we do certain things, we will launch out into unknown depths and make a trial of something with the most sanguine expectations.

With this preface as my only excuse, let me narrate a process I have employed the last year for the removal of external tumors with unlooked-for success. I will first state that the process is not original with me; but rather of the order charlatan. I will proceed at once to the cases in contemplation.

Feb. 6, 1872. Mrs. B—, aged about twenty years, applied to me for the relief of a dry, hard and very painful tumor in the palm of the right hand. It was then about an inch long and eight lines broad, nearly level with the skin, slightly bluish in color, dry and squamous on the surface. Had been forming over two years, and when first noticed was about the size of a pin head.

She had visited another doctor before coming to me, and he had pronounced it a cancer, and desired to remove it by extirpation in the usual manner. I sanctioned his diagnosis and advised the same treatment; but she declared she would die before she would have it "cut out," and desired to know if there was not some kind of salve that would remove it. She had heard of such measures being used. Following the hints of more learned surgeons, I replied, that plasters, I believed, were sometimes used but with indifferent success, and with almost certain recurrence of the difficulty. Imagine my very embarrassed position when she desired me to use any of the plasters referred to, and that she would abide the result, no matter what it might be. I never had heard of but one "cancer plaster," but I at once resolved to test the qualities of this. I took—

R. Chloride Zinc, (granular), } aa, q. s.,
Pulv. Sanguin. Radix, }

To make enough paste to cover the tumor, and rubbed the two together in the open air until deliquescence occurred, forming a very smooth, firm paste. I then cut out a hole in a piece of common adhesive plaster to correspond to the size and shape of the tumor, and stuck it on to protect the sound tissues from my application. Then spreading the paste evenly over the whole tumor, to the depth of half a line, I put over the whole another piece of adhesive plaster, not only to keep the paste in position but to get the thing out of sight, and bade my patient let it remain so for forty-eight hours, when I would again examine it.

Feb. 8. Removed the adhesive plasters, and was very agreeably surprised to find the tumor presenting a parched and withered appearance, and separated by a narrow, shallow seam from the healthy substance in nearly its whole circumference. I ordered a dressing of simple cerate after thoroughly cleansing it with soap and water.

Feb. 10. The simple cerate dressing has been changed twice a day. To-day the tumor seems to be entirely separated, by supuration, from the sound parts, and lies in the wound like a foreign body. Taking it up carefully with dressing forceps I discovered several fine filaments reaching down into the bottom of the cavity, and as the slightest tension produced pain, I allowed it to remain.

Feb. 11. To-day I succeeded in picking out the tumor without the slightest twinge of pain. Ordered the simple cerate dressing, and in a few days the wound was completely filled with granulations and healed over. She declared that with the exception of a few hours' slight pain and lameness in the hand, she had not suffered at all from the removal. The tumor when out resembled a scorched piece of leather half an inch thick and of the dimensions before given.

March 3, 1872. She again consulted me, and exhibiting two little points in the cicatrix the size of a pin head, and quite red, informed me that they pained her considerably, and desired the plaster to be again applied to them. Fitting the adhesive plaster around them, as with the larger one, I applied the merest particle of paste to each, and in a few days had the satisfaction of removing them, each the size of duck shot. I have seen her repeatedly up to this date, but there has been no recurrence of the tumor or pain.

Soon after this, Mrs. A., aged about 50 years, consulted me about a tumor under the right eye, half or three-quarters of an inch from the lower border of the orbit, and about the same distance from the nose. It was quite red and painful, and had been three years in forming. I used the paste in precisely the same manner as before.

In forty-eight hours I removed the plasters and found considerable inflammation, but no tendency to separate from the healthy parts. Applied the plaster around it, and used the paste again. Forty-eight hours afterwards I removed the plasters, and as she lived some distance from my office, I told her to apply the simple cerate till the tumor was loose or came out of its own accord, and then continue the same dressing till it healed.

Aug. 26, 1872. She came to my office with a red, protruding tumor twice the size of the first. Said that the old one came out all right, and the wound healed up, but that this one soon began to grow. She had been careless about having it removed until now it was too painful to endure.

It was easily removed with one application of the paste, and the after-dressing of simple cerate. It has not yet recurred.

Nov. 10, 1870. Mrs. K— came to me with what I diagnosed, after Erichsen, as an encysted abscess of the right breast. Treated

it with tr. iodine, etc., till Dec. 18, when I administered chloroform, and inserted two setons. Ordered stimulating applications topically, and some alterative treatment.

July 19, 1871. The breast seems to be all right; the setons were removed, and the abscess perfectly cicatrized.

March 20. Appears with a new abscess directly over the site of the old one. Will not submit to setons. Is opposed to the exploring needle, and positively objects to the lance.

R. Cut a hole in a piece of emplastrum adhesivi the size of a hazlenut, and placed it over the most prominent part of the abscess. Applied the paste.

In four days, I removed a plug of destroyed tissue. Put a very small quantity of the paste in the opening thus made, filled in with a tampon of cotton-wool, and in two days' time was pleased to learn that large quantities of pus had escaped from the abscess. I now ordered the simple cerate dressing.

April 20. It is healed up and the mammary gland natural, except the cicatrices. Has not recurred.

I now began to conceive that so far as removing external tumors was concerned I was possessed of something as potent as Aladdin's lamp, and for the next six months not a tumor, wart, or excrescence of any kind, came to my notice, but what an immediate application of the "Cancer Paste" proved as efficacious as the barber's salve did to the humpback's neck in removing the fishbone. At last my eyes were opened to the necessity of caution in the administration of this all-potent and quackish paste, by accidentally causing a fistulous abscess in the parotid gland in removing an obstinate tumor (simple, however,) of the neck. But whether its removal by knife might not have been more disastrous I am not prepared to say. I am now operating on a tumor of the antrum of Highmore in the case of a young man who came before our medical association last fall. It was the general verdict that the right superior maxillary must be extirpated. I have repeatedly applied the paste on cotton, to the cavity formed by the expulsion of the bicuspid, canine and two molar teeth. The tumor has gradually come away in large pieces, and smaller ones, and the tumor lessened in size more than one-half at this date. I will try to remember and report the result when the treatment is completed.

On the whole, I conclude that this paste is useful in removing cutaneous tumors where the patient will not yield to the knife; and that for the removal of cancers it is less painful and more successful than extirpation in the ordinary way. I will, however, advise care in its use, that too great inflammation may not occur from applying it to a large surface at a time. If you have a large tumor, remove it by repeated applications through a small opening in the integument made by the first application. Whether it rests with charlatans to make use of such agents depends upon the patience and good nature of our Regulars. Of one thing I am wholly convinced by a continued observation of years, and that is, that many a good thing is poh-pohed at by those who ought to look into the matter and determine, by actual experiment, whether it is good or otherwise.

Further, allow me to say, in conclusion, that if the whole system of a cancerous patient seems to be impregnated with the malady, and the cancerous cachexia is everywhere visible, this means, as well as all others, is futile. A cancer should be removed ere it is fully known to be a cancer, and the use of the "Cancer Paste" will often gain the consent of patients for an early operation when they would not grant it otherwise.

ARTICLE III.—*Pathology, Causes, Course and Treatment of Rheumatism.* By JAMES S. WHITMIRE, M.D. Read before the Woodford County Medical Society, Metamora, Ill., Tuesday, Jan. 7, 1873.

MR. PRESIDENT, AND GENTLEMEN OF THE ASSOCIATION:

Having been appointed at our last sitting to make a special report upon rheumatism, its pathology, causes, course and treatment, I would beg leave to submit the following for your consideration.

In the first place, rheumatism is one of the oldest diseases known and recognized by the profession as a distinct disease, manifesting a peculiar character of inflammation, which is confined in a great majority of cases exclusively to the fibrous textures or membranes of the animal organism. It may be considered as pos-

sessing two distinct stages, the acute and chronic. The grade between these two stages may be reckoned as sub-acute, and partakes of the nature of both the acute and chronic stages, and hence it cannot be considered a distinct stage. The acute stage of rheumatism usually occurs as the primary disease, and its decadence into the sub-acute or chronic stage is simply a subsidence of the original attack into the latter stage. It is true, however, that, at the onset of the disease, we may have a sub-acute condition, and if not properly treated, or through indiscretion, this condition may develop into the well marked acute disease or subside into the chronic form. This is just as likely to occur as though it had been acute in the beginning, and probably more likely, from the fact, that, as the pain is less severe than in the acute stage, it is more liable to be neglected.

Rheumatism is an inflammation, but it is peculiar in its characteristics, affecting only one particular or special tissue—the fibrous—and this inflammation, though affecting primarily the fibrous tissues, may extend to other tissues of the body from contiguous sympathy, and therefore rheumatic inflammation may be present, or take place in any part of the animal organism where this (fibrous) tissue is present. We may therefore expect, most frequently, to see it seizing upon and affecting those parts which are the most abundantly supplied with this tissue; hence the large joints, tendons and pericardium are the most frequent recipients of its unwelcome visitations. Rheumatic inflammation is a peculiar as well as a specific disease. It is peculiar, because there is no tendency, while it is confined to its proper tissue, to suppuration or gangrene, a not infrequent result following ordinary inflammations of any or all the other tissues of the body. It is specific, because it has little or no tendency to affect any other but the fibrous tissue; but when rheumatic inflammation extends to other tissues from contiguity or sympathy, the character of the inflammation may or may not be changed, and its character may be the same, and the termination the same, as though it had arisen from any other cause, and may, consequently, be characterized by the usual phenomenon of ordinary inflammations, viz: pain, heat, redness and swelling, and its terminations are, consequently, by resolution, with or without effusion, by suppuration or gangrene, according to the circumstances of the grade, or intensity of the inflammation.

While the grade of rheumatic inflammation in the fibrous tissues may be ever so acute, and the intensity of the pain correspondingly great and persistent, I believe there are few if any cases on record that have terminated in either suppuration or gangrene; while, on the other hand, it may terminate as other inflammations, in resolution with or without effusion, and hence its peculiarity and specific character.

The object of this paper is, not so much to institute a more thorough investigation into the course of this disease, or the character of the inflammation attending it—these being sufficiently well understood, and treated of at length in all our standard works—as it is to invite the attention of the profession to the idea or theory, originally suggested and acted upon in the treatment of this disease, by the late Prof. J. K. Mitchell, of Philadelphia, which was, in substance, this: that rheumatism is a constitutional disease, the inflammation being brought about and maintained in consequence of functional derangement of the spinal cord; which derangement is produced by either active or passive congestion, or perhaps inanition of that important appendage to the great center of the nervous system.

It is only necessary, in this place, to mention the conditions necessary or most likely to disturb the functions of the spinal cord, and therefore the circumstances most likely to produce rheumatic inflammation; these are, exposure to the vicissitudes of the weather without sufficient clothing; heat, cold and moisture, wet feet, and the like; and these may not be the direct causes of the disease—they are most likely, if not certainly, the exciting cause. The view held by the greatest number of pathologists is, that there is a morbid material always present in the blood, in this disease; this *materies morbi* has been supposed by many to be uric acid, but chemical analysis by our best qualified observers has failed to establish its presence in a greater quantity than in health, while in gout—an analogous disease—its presence in a morbid quantity has been clearly demonstrated. "Others," says Prof. Flint, "have adopted the supposition of Prout, that the morbid principle is lactic acid. The majority of pathologists, at the present moment appear to regard this supposition as probably correct, and it is generally accepted as a rational basis of treat-

ment." "Lactic acid is supposed to be formed during the destruction of sugar in the lungs in health; it may be conjectured, therefore, that its presence in the general circulation depends on circumstances which either occasion its undue formation, or which interfere with its entering into combinations leading to its disappearance. It has also been conjectured that lactic acid is formed in the decomposition of the gelatinous and albuminous substances." This now brings us directly to the point at issue. Assuming, therefore, the lactic acid hypothesis to be true, the query naturally arises, may not this disintegration of those tissues, and the consequent formation of lactic acid, be brought about and even facilitated by the supposed functional derangement of the cord? And may not the failure of the acid to form new combinations in the lungs, and thereby preventing its elimination, be consequent upon the same functional disturbance? These are questions that naturally arise; and while we are conceding the acid theory of this pathological condition of the system—which is the acknowledged hypothesis—may we not, rationally, look for the cause in the direction of the *great centers*, that preside over and govern the nutrition and decay of the economy, while the elimination of all morbid materials from the blood is dependent upon the functional integrity of the same governing cause? Most certainly! is the only rational answer that can be made.

From time immemorial, the practice of the profession, in this disease, has been to a greater or less extent empirical; it has always, however, been governed by the greatest light and the most mature judgment that could be brought to bear in the premises; latterly however, since the co-ordinate branches of science—chemistry and pathology—have been levied upon by the profession, and made to yield up their treasures for the benefit of mankind, we no longer have to grope our way in the dark, theorizing and experimenting in order to arrive at conclusions, but at once apply principles and knowledge where empiricism was once the rule; hence, in the treatment of the disease under consideration, the professional mind has undergone a great change, and what was once considered a formidable disease, has become, under the light of science, one of the most easily managed of any in the catalogue of human diseases.

It has ever, until recently, been a query in the minds of

the ablest men of the profession, why this peculiar inflammation should be so erratic in its course, and so stubborn and persistent in its duration, notwithstanding the great variety of means at our command which are used to allay the pain and stay the progress of the disease. The well-known fact, that rheumatism affecting one limb, is more likely, in its peregrinations over the body, to light upon the other on the opposite or corresponding side, or persistently to remain on the same side, manifesting no disposition to cross the median line, would seem to indicate of itself that there must be some central organic derangement, if not absolute disease, that decides the position and locality of the disease. The economy depends for its healthy vitality upon these great centers, hence those portions of the organism become diseased when the functions of organic life from which they receive their healthy action are disturbed, and recover them again so soon as those functions are restored to their normal condition. This regularity in the transition of this disease from one part, or joint, to a corresponding one of the same or opposite side, is the rule; but there are exceptions not unfrequently noticed, such as its sudden transmission to the heart or its investing membranes, yet, true to its steady specific character, even in this instance it makes its appearance first in the fibrous tissues, and then may extend to the serous membranes from contiguous sympathy, through the basement membrane which is areolar, or compound fibrous tissue. It is therefore not to be wondered at, that the pleura and peritoneum are subject to the occasional invasion of this malady, because of the compound fibrous structure of their basement membranes. Now the easiest and most rational conclusion respecting the cause of this uniformity in its migratory tendency, is, that the cause of the disease rests in, and is governed by functional derangement of the spinal cord, and this being the seat of organic life from which the whole animal economy receives its vitalized support, we would naturally look to that source to account for any disturbance of these functions, and more especially those so commonly manifested in corresponding or co-ordinate portions, as well as corresponding tissues of the body.

Again, if the rheumatic inflammation has proven so unyielding as to resist all known remedies and methods of treatment, and gone on to the extent of producing confirmed deformity, we nearly

always, if not quite universally see that deformity in exact harmony with its acknowledged laws of co-ordination, consequently corresponding articulations and tissue, either on the same or opposite sides, are affected. Therefore taking for granted that the inferences drawn from these circumstances are true, the following questions would naturally arise: What is the nature of the functional derangement of the spinal cord? And what are the predisposing or exciting causes of such derangement? The predisposing or exciting cause of the disease is sufficiently set forth and commented upon in our standard works on theory and practice, under the head of causes or influences favorable to the development of rheumatism, and therefore they need but a casual mention in this paper; however, it may be well enough in this place to add our testimony to the now general opinion, that there is a rheumatic diathesis which may be either hereditary or acquired, the subjects of which are more prone to attacks of this disease than those who are exempt from this hereditary or acquired taint, hence a very slight exciting cause, in one possessing this predisposition to the disease, will develop the malady in its most aggravated form, whereas the same circumstances would be passed by without exciting the least irregularity in the health of one exempt from this predisposition.

That the predisposition to this disease is inherited, I have not the least doubt; but, because an individual has inherited the taint—if it may be so called—it is no evidence that he will certainly, at some time in life, be afflicted with rheumatism, because an exciting cause may never be presented to him, nevertheless, the predisposition is there, and will remain with him. This we see exemplified in other acknowledged hereditary diseases, such as gout, asthma, tuberculosis, scrofula, etc. Most of the members of such families will sometimes be exempt for one or two generations, and then in the third, perhaps, it will be developed with the most deadly malignancy.

As to the question in regard to the nature or cause of the derangement of the cord, it is more easily asked than answered, from the fact that seldom or never does any person die of this disease, excepting, perhaps, now and then a patient may succumb to its cardiac complications, and of these, the post-mortem examinations have hitherto been limited to the immediate seat of the diseased

structures, and notes made of their pathological condition, without even a thought of carrying the investigations beyond that point. And those who have become permanently deformed from the effects of the disease, usually live till the pathological condition of the cord gives place to the physiological; but from any changed condition of diseased structure, there is seldom or never a recovery. Pathologists have hitherto only directed their investigations to the local changes that have taken place in the diseased structure; hence we have ascertained, that, though the rheumatic inflammation has its primary seat in the fibrous tissue, and is not disposed to terminate in the usual manner of ordinary inflammations, yet when by contiguous sympathy it seizes upon the serous, muscular or other tissues, the programme of its termination is changed to those of other inflammations, and that, too, without in the least affecting the primary inflammation, or interfering with the original cause.

But there is a termination of pure rheumatic inflammation—if we may be permitted to call muscular atrophy a termination—in the condition known as atrophy, where all apparent signs of inflammation in the interstitial and muscular texture have subsided—provided such inflammation ever had an existence in fact, a matter, which to my mind is very questionable; because when a muscle, as is supposed, becomes implicated in rheumatic inflammation, the probabilities are, that the cellular tissue surrounding the muscle and every fibre and intricate cell-structure of the muscle, that this tissue is really, and in fact, the seat of the disease; the pain being caused by the movement or contractility of the muscular fibre, thus interfering with the quiet or passive condition of this tissue, the muscular fibre probably entirely exempt from the primary inflammation, but may, like other structures, become involved on account of the intricate connection of the structures. It may be mentioned, in this connection that atrophy is a condition not unfrequently resulting from rheumatic inflammation, and the cause is usually attributed entirely to the want of proper exercise; the pain produced by movement creating or causing the inability to use the muscles; hence from inactivity alone the absorbents are enabled to maintain a degree of activity sufficient to carry off the worn-out or broken down tissue faster than the recuperative powers of nature can build it up. But this reason is not sufficient of

itself, to my mind, to account satisfactorily for the cause of atrophy, and while I am at once ready to admit, that inactivity of a particular muscle may be, under particular circumstances a sufficient cause of atrophy, yet when there is no "power behind the throne," as it were, to account for the inflammation that in rheumatism precedes the atrophy, there is nothing more certain in nature than that it would yield to appropriate local, general or specific treatment, and the atrophy be checked by exercise, friction, the electrical current, or by a spontaneous effort of nature to readjust the nutrition of the parts by vitalizing the cellulo-molecular formation to that extent that it predominates over the disintegration and absorption of the muscular tissue.

But is this the case where atrophy is the result of rheumatic inflammation? Does any local treatment avail for either the atrophy or inflammation to put a stop to their certain and alarming disintegration? The answer is, most emphatically, No. Then where are we to look for the primary cause unless it be in the functional derangement of the spinal cord—that great vitalizer of the whole animal organism? And where are we to seek a remedy, excepting among those agents, the action of which is directed to the spinal cord, by either direct general or specific action?

The same rule holds good where there is atrophy from any other cause. We have, for instance, a case of atrophy or paralysis, perhaps both, from compression of the cord, by the dorsal spine, from injury or other causes; these are incidents that necessarily arise from compression; or, there may be paralysis from inanition, as is the case in *infantile* paralysis, atrophy ensues, and, perhaps, in connection with this, there may be fatty degeneration of the tissues, which is not at all uncommon even after rheumatic inflammation of the cellulo-muscular tissues.

In this case—that of injury—do physicians institute any other treatment than to keep the extremities warm? Would not any professional man be considered wanting in acumen who would undertake to drug such a patient, with the expectation of benefiting him any further than by general or local antiphlogistic appliances he might prevent or lessen the local inflammation that would be likely to ensue? Would not the chief attention be paid to the local treatment? And if, by any surgical manipulation, the com-

pression could be removed, would not that be resorted to as the primary means for the restoration of the spinal functions? And, when that was accomplished, nothing further would be required, except the ever-present *vis atergo* to restore to the limbs and muscles their proper functions.

And if this surgical interference should fail, and the powers of nature—the greatest of all panaceas for human ills—should prove abortive, or insufficient to restore the integrity of the functions of the spinal cord, we then have presented the same phenomena—atrophy with its concomitants—as in, so-called, muscular rheumatism, but without the pain of inflammation of the articular and cellular tissue. But herein consists the primary cause of atrophy in either case; it being produced from a want of equilibrium between the vital forces connected with the breaking down and building up, or the nutritive functions of the animal organism, which condition is brought about and sustained by a disturbance from one cause or another of the great center of organic life—the spinal cord.

Thus, we perceive the universality of the law—that like causes, from whatever source they may originate, produce the same effect, and in neither case would paralysis, proper, on the one hand, or paralysis from inertia on the other, be necessarily followed by atrophy, were it not, as formerly suggested, for the disturbance of the vital forces originating in spinal derangement, or absolute disease of this function.

Taking it for granted, therefore, that this hypothesis is correct, the action of the whole catalogue of anti-rheumatic remedies that experience has taught us is most reliable in the treatment of this disease, may be easily explained by the conceded theory of their action on the animal economy. Opium, for instance, manifests its curative agency in allaying pain, and producing rest, which is of the greatest therapeutic benefit in equalizing the circulation and rendering accumulations less likely to occur, and even removing such accumulations from the central organs, and lessening the pressure upon the capillaries of the medulla spinalis. Venesection manifests its agency by the immediate sedation produced upon the heart and arteries, the relaxation of the capillaries, exhalents and emunctories of the general system. The agency of the saline cathartics is manifested by lessening the amount of the circulating

fluids by means of copious alvine evacuations, thereby directing, or rather changing the current of the circulation and lessening its accumulation in the nerve centres.

And now, since the pathology of this disease is somewhat better understood, and the theory of the acidity of the secretions maintained, including a superabundance of fibrin in the blood as ascertained by our most accurate observers, it is probable that the alkalies manifest their remedial agency through the neutralization of the acids, as well as their tendency to lessen the production of fibrin in the blood, hence lessening the liability to the formation of false membranes upon the free surfaces attacked by rheumatic inflammation.

Colchicum, probably, manifests its curative agency in more points than any other single remedy in this harassing disease, and each particular point would be found to possess more or less of a direct relation to either lessening or relieving local congestions, such, for instance, as its known direct action upon the kidneys and the cutaneous exhalents, producing copious diuresis on the one hand or profuse perspiration on the other; besides, after it has begun to bring the emunctories of the system under its influence, among its manifestations are recognized those of sedation, affecting the impulse of the heart and arteries, and at the same time producing copious discharges from the bowels. These are only a portion of its recognized effects, and in this place we will not speculate upon its probable direct or specific influence over rheumatic inflammation, which is of no small consideration judging from its long popularity with the profession, as a remedy in rheumatic inflammation.

We might mention other remedies used under the varied condition of circumstances presented by this disease, among which are guaiac. and gelseminum, and assign to each its place, and point out the particular and distinct position that they each maintain in the treatment of this disease, but would probably fail to throw any material light upon the subject; therefore, from what has been said, and the conclusions we have drawn, there can be nothing more simple than what the plain indications of treatment are, and what should be apparent to every one.

It is simply cupping, or blistering the spine as circumstances may require, in conjunction with the use of local and general

remedies, such as the judgment of the physician in each particular case may dictate. We began this treatment as early as 1856, immediately after hearing Prof. Mitchell deliver his course on rheumatism, and in no instance, in a very extensive country practice, has this method disappointed our most sanguine expectations; neither has it made any difference in the application of cups to the spine, whether the disease was in the acute, sub-acute or chronic form, for this, in our opinion, is one of the first, last and main indications in its successful treatment, and therefore no time is to be lost in dallying with other means, but immediately resort to dry cupping with as large glasses as can be borne by the patient, and should circumstances be such that in our judgment a resort to vesication, or if only irritants or rubefacients, would be preferable, it is attended to at once, and in either case with the greatest relief to the suffering patient. There has been no instance of this disease under our care that has not speedily yielded to this treatment, along with appropriate internal and local remedies, and, indeed, much more readily than formerly when no attention was paid to the spine.

Among the constitutional remedies are those previously mentioned, but above all others stand colchicum and bi-carb. potassa. Locally, cotton batting, friction with rubefacients as the necessities of the case may require, may be applied to the affected parts. The average time required, in our practice, in a given number of cases, to place our patients on the convalescent list under this treatment, is from ten to twelve days; whereas under the ordinary practice, where no attention is paid to the spine, the average duration of the disease, in a like number of cases, is from sixteen to twenty days. Another thing that is worthy of note, in this connection, and which is of no small interest, both to the professional man and the patient, is, that since we have adopted this practice we have never seen a single instance of either endocarditis or pericarditis occur among our rheumatic patients, and besides the difference in the time of convalescence gained by our present practice, our patients have all had a more speedy and perfect recovery; and in no instance has the disease manifested so migratory a tendency as is usual, leaving the heart entirely exempt from its unfriendly visitations; and should further experience go to establish the fact, that cupping or blistering the spine, renders rheumatic inflammation less migratory, it

will at least strip the disease of one of its greatest sources of danger, and give us more confidence in giving a prognosis in a given case.

During the two years that we were in the army as surgeon of the 56th Regiment Illinois Vol. Infantry, from 1861 to 1863 we had no disease that gave us so much trouble and annoyance as rheumatism in all its forms, excepting perhaps diarrhoea and dysentery. Its most prevalent forms were lumbago and intercostal, from their mildest forms to their most distressing character. Our government supplies at best were meager enough, and we would often run out of a leading article for particular diseases long before we would have an opportunity of making a new requisition. At our morning sick-call, on almost every day, many of this character of cases would present themselves for treatment; as a matter of course, our acet. ext. of colchicum could not go very far, as we were only permitted to draw a certain amount for a given time, and hence many of our army surgeons who cared well for the sick under their charge, were more than half the time out of this important drug, and were, therefore, borrowers from those who cared less for those under their charge, or were ignorant of what was so often absolutely necessary for the welfare of their men. But by paying attention to cupping the spine, in the secret of which we had our assistant surgeon, and hospital corps thoroughly informed, we managed to get along admirably with our meager governmental supply of colchicum, made into pills with ipecac. Of these we ordered three each day, with from three to four twenty-grain doses of bi-carb. soda. By these means we were enabled to keep our men on duty during the whole time of treatment; whereas, under ordinary circumstances they would have remained on the sick list and finally become afflicted, as thousands did, with nostalgia, and either died, been discharged, or remained an incubus upon the government while they continued in the service.

Many of our regiment would come to me at the hour of sick-call, and say, "I do not want to be put on the sick-list, but if you will order me cupped, as I was yesterday, I shall be able for duty, and get along admirably, as the cupping yesterday cured me of my aches and pains."

This was our experience in the army, and it has been the same

in private practice, in regard to this treatment, for sixteen years; and, therefore, for the benefit of suffering humanity I would most earnestly recommend it for adoption to my professional brethren. And if, in the progress of their professional inquiries, they should ascertain as a fact, that there is a "balm in Gilead," I trust that they will not hesitate, either from prejudice or conceit, to use it to allay the pangs of suffering humanity; because, it is no small matter to our patients to be relieved of from two to six weeks of the most agonizing suffering, to say nothing of the advantages to be derived from a more perfect restoration to health than is usually obtained under the ordinary means of cure.

Selections.

Paresis. Read before the Northern Medical Association of Philadelphia, September 27, 1872, by ANDREW K. MINICH, M.D.

The term paresis is from the Greek—"I relax," and was introduced by Saloman, a Swede, as a substitute for "general incomplete paralysis of the insane,"—a very unwieldy term, and only partially expressive of the disease under consideration.

Since the days of Calmeil, one of the earliest writers on paresis, it has been recognized as existing in three distinct stages. The symptoms in the first stage are various, and chiefly mental.

There is often a disposition to wander from home, to neglect every-day duties, and to commit petty thefts. Generally there is a change in the morals of the patient; a religious man may become profane, and *vice versa*. Undue importance is attached by the patients to themselves. They imagine they have become wealthy, hold honorable positions, and express determinations to erect churches, colleges, establish new lines of railroads, or project other schemes of great magnitude. The voice in this stage is changed to a slight stutter or stammer.

The more marked symptoms in the second stage are disturbed locomotion and difficult articulation. The walk in this stage is peculiar. Dr. Sankey has well observed "that there is in health a kind of expression in a person's gait from which we may almost divine what kind of errand or business a man is upon." A man walking for exercise has a gait differing from one walking to attend to business. The two chums, with arms hooked, as they saunter along, contrast in a marked manner with the excited broker on Wall street. The gait of a person with paresis is that of

a man walking "without a definite object;" and later in the disease walking becomes more a "matter of business." The feet are raised but slightly, are widely separated, and fall flat upon the floor. His arms are to him what the balancing-rod is to the tight-rope walker—a means of maintaining his equilibrium. All the muscles seem affected. Any act requiring muscular interference is attended by phenomena due to a want of harmony in their action. To compare the movements and actions of a paretic to a drunken man would not be amiss, save that the paretic is cautious and deliberate, the drunkard reckless and garrulous. Later in this stage, walking is very difficult, and, from the labor spent upon its performance, a looker-on might well surmise that the performer was making it a specialty. The articulation is drawling and difficult, often the syllables are run into each other, and mumbling takes the place of articulate sounds. Twitching of the muscles around the mouth is common. The tongue when protruded is very tremulous, and is quickly drawn back into the mouth, in spite of urgent requests to the contrary. Grinding of the teeth is frequently indulged in,—a most unpleasant symptom to those within hearing distance. It grates sufficiently hard upon the ear to have such a symptom show itself in a bedridden patient, but to see and hear a man, with a confused stare, with reason dethroned, wandering around grinding his teeth simultaneously with every short step he takes, is almost beyond endurance. The intellectual, moral and motor faculties are all more or less influenced. The senses of touch and taste are impaired to a more marked degree. If a paretic is asked concerning his health, the reply generally will be, "first-rate," "bully," "beautiful," or some other brief expression. I would lay special stress upon the first of these answers, for almost invariably he will be "first-rate." The conversation of the paretic in this stage, as well as in the first, is not disconnected. Fixed delusion is very rare. His ideas bear the impress of change; they are not fixed like those of the monomaniac; *now* he may be worth a hundred thousand dollars, and cashier of some bank, and one hour hence be a millionaire and chief executive of the nation. He grows *richer* but never *poorer*. "Excelsior" seems to be his motto. The symptoms, then, in this stage are, a want of power to control perfectly the motor, intellectual and moral faculties.

The third stage manifests its advent by dementia, and inability to stand upright or to execute any movement requiring the use of more than a few muscles. This muscular feebleness is more marked in the morning. In this stage the utterance is thick, and often unintelligible. The muscles are constantly twitching. The knees of the patient, when sitting, shake like those of a man suffering from a chill. His teeth chatter, he looks cold, although he tells you that he is "first-rate." Urine and fæces are passed apparent-

ly unconsciously. The urine in all the cases that I have observed was extremely phosphatic, not alone in this stage, but also in the second, although somewhat less in the latter. The temperature, according to Mr. Dodge, resident student at the Philadelphia Hospital, who carefully observed it at my request, was found to vary from one-half to one degree, according to the time of day. In the morning it was, in confirmed cases, one hundred to one hundred and five-tenths degrees. In the evening the mercury invariably rose to one hundred and one degrees. The appetite is good, almost voracious, up to the time of dissolution. This, no doubt, assists in prolonging the life of the patient when to the observer death seems imminent. I saw poor John Ambrose, a fine minstrel, whose voice once charmed enthusiastic audiences, literally, like Herod of old, eaten by worms, numbers of which, thick and fat, crawled from his anus and large putrefying burrowing sores. He was a mass of rottenness when death entered his chamber. He partook of a hearty breakfast but a few hours beforehand.

Picking at the bed clothes, and tearing them into shreds with hands and teeth, afford hours of employment to the bedridden parietic. Irritation applied to the soles of the feet produces immediate reflex action. Epilepsy and epileptiform convulsions often occur. Sometimes the patient is seized by apoplexy: indeed, not a few meet their death in this way.

Bed-sores are prone to occur in this stage, their formation being due to the patient's continued supine position, and to the frequent presence of irritating matter. The symptoms then characteristic of paresis are, mental derangement, difficult articulation, and disturbed locomotion.

The cause of this strange malady is still wrapped in mystery. Excess in some form upon the part of the patient, at some period of life, no doubt, lies at the bottom of this disease, as of so many others. The histories of cases confirm this belief. Medical science cannot, however, explain why it is that one person using alcoholic drinks as a beverage will, as a consequence, die of a cirrhotic liver, and another of a cirrhotic brain.

The diagnosis of paresis is not difficult. It may, however, be confounded with muscular atrophy, lead and mercurial palsy, chronic alcoholism, and certain cases of spinal paralysis. It differs from general muscular atrophy in this, that the latter is free from mental derangement. Symptoms of mental derangement, however, might occur in a case of muscular atrophy. In such a case the peculiar form of insanity in paresis, and the condition of the muscles, would serve to distinguish the two affections. Lead and mercurial palsy are less likely to be confounded with paresis. Lead palsy manifests itself more locally. The imperfect locomotion is more circumscribed. The wrists are chiefly affected, and the muscles of the affected parts become wasted. The condition of

the gums and the absence of delirium in lead palsy would also serve as distinctive features. Mercurial palsy can also very readily be distinguished. The peculiar trembling of the hand does not occur in paresis, neither is there mental derangement in mercurial palsy. Chronic alcoholism, the result of an abuse of alcoholic drinks, in which the motor and mental functions are affected, is more likely to be mistaken for this disease by a casual observer. This, however, is only true of decided cases of a chronic nature. They present distinctive characteristics. According to M. Thomeuf, the form of mental symptoms usually presented in alcoholism "is a kind of melancholia, with exaggerated fears, frights, delusions of being followed or watched, or of being accused of guilt. The paretic is never afraid, is not melancholy, generally entertains grand ideas, and is never unwell." All those that came under our own observation confirm this statement of Thomeuf. All would express themselves as being "first-rate," and this in tones, to use the words of Dr. Bucknill, "in which could be detected the signs of incurable disease." The appetite in alcoholism is deficient; that of the paretic can scarcely be appeased. Epileptic and epileptiform convulsions occur in paresis; delirium tremens in alcoholism. The latter is curable; the paretic always dies. Certain cases of spinal disease in which the paralysis is more or less general, may be complicated with delirium, and thus be mistaken for paresis. The history of the case, the condition of the spinal cord, and the nature of the delirium, would serve to point out the true diagnosis.

The pathology of this strange malady has been a fruitful source of discussion in later times. Observers do not agree as to its nosological position. Some view it as a form of mania upon which are engrafted paretic symptoms. This view is refuted by the fact that symptoms of paresis never occur in cases of chronic mania. Others maintain that paresis may exist without paralytic manifestations, and recognize it by the name of "ambitious mania." Ambitious mania, though it resembles paresis in the character of its delusions, is a separate affection. Paresis is ambitious mania, but it is something more. We have seen cases of chronic mania, of simple insanity, without any apparent physical disturbance, that even now pace the wards and strut along the corridors of the Insane Department of Blockley Hospital, whose imagination knows no limit. One sports with millions, another is the Saviour of the world, while several proudly march along, conscious that the world recognizes them as ruling monarchs. The majority of observers, however, look upon paresis as a separate affection—a disease *per se*.

It presents characteristics similar to other affections. It is influenced by locality. Dr. Grey makes mention of the fact that in the Edinburgh Asylum there are usually to be found from twenty to twenty-five cases, while Montrose Asylum, about twenty-

five miles distant, and containing about three hundred patients, has none. The disease is more prevalent in the eastern and northern parts of America than in the southern and western. Males are much more subject to paresis than females. Statistics prove the proportion to be about seven of the former to one of the latter. Age exerts an influence. Most patients are between the ages of thirty and forty years. Cases occur occasionally, however, to prove that neither the young nor aged are wholly exempt. All paretics are insane. Insanity is one of the principal symptoms. This mental derangement is manifested by an exalted imagination, —very rarely presenting itself in a different form. Respecting the pathology of paresis, some view it as an inflammation. M. Par-chappe says, "all facts afforded by pathological research agree in confirming the inflammatory nature of the characteristic lesion of the cortical substance of the brain." M. Belhomme expresses a belief that "paresis is an encephalitis of a peculiar kind."

The post-mortem appearances are not constant in every respect. Sometimes there is softening, sometimes the brain is abnormally firm. This difference is probably due to the comparative duration of the disease. The arachnoid and pia mater generally present traces of inflammatory change. The microscope has detected in most cases a varicose condition of the capillary vessels of the cortical substance, and also a marked increase of its connective tissue. This increase of the connective tissue of the cortical substance is the most constant of the morbid conditions. It is, pathologically speaking, a cirrhosis of the cortical portion of the brain, the result of a slow inflammation. There is no doubt that the disease is cerebral. The impaired locomotion is not owing to muscular paralysis, but to something interfering with co-ordinate action. The constantly cheerful answer which the patient ever gives in regard to his or her health is due to one of two conditions, or to both. It may be but the result of a feeble conception. The brain in its diseased condition, with its cells compressed by the superabundant connective tissue, may be incapable of taking cognizance of the body's condition. The fault does not seem to be in the afferent or efferent nerves. They faithfully transmit impressions, as is shown by the immediate reflex movements that take place in response to any irritation applied to the surface of the body. It may be that even though the patient's brain is capable of appreciating pain and poverty with their accompanying shadows, yet his peculiar form of insanity, his ambitious mania, his radiant line of thought, will scatter those shadows as the wind scatters the leaves of autumn. His judgment has fled, and as his idea of wealth and splendor is not corrected by his bed of straw and lonely cell, in like manner his idea of personal comfort and perfect health may not be corrected by painful sores and fatal disease.

The prognosis is always unfavorable. A few cases of recovery

are reported. It may be that the diagnosis was not correct. Recovery, it is stated, was preceded by a general breaking out of boils.

Of the treatment very little can be said. Aside from attention to the general comfort and cleanliness of the patient, it consists merely of a "meditation on death;" of reading from time to time the inscriptions upon the mile-stones as our buoyant patient totters along the downward road to meet his inevitable doom. He is an inmate of that ward above the entrance of which is written, "For Incurables,"—a department which, through the deeply-searching spirit of modern science, may ere long, we hope, be made vacant, and the unfortunate paretic among the rest be restored to health, and ushered from that abode of fate.—*Phil. Med. Times.*

The Treatment of Whooping-Cough with Quinine. By B. F. DAWSON, M.D., Clinical Lecturer on the Diseases of Children in the Medical Department of the University of New York; Physician for Children to the Demilt Dispensary; to the New York Free Dispensary for Sick Children, etc.

I am well aware that every therapeutical assertion, especially concerning pertussis, is to be accepted with the utmost caution, and that value can be placed upon such only as have been well tried and are based upon careful clinical study.

I deem it, however, the duty of every physician, after having carefully observed the value of any one therapeutical agent in the cure of some one disease, to make the same known to the profession, whereby its real value may be proven or its worthlessness exposed.

In advocating the use of quinine in pertussis, I am fortunate in being able to support my own experience with that of one whose name is well known on both continents, and whose contributions to the progress of medical science are always received as the teachings of one speaking with authority. I refer to Professor Binz, of the University of Bonn, Germany.

In 1870, a paper on "The Use of Quinine in the Diseases of Children" was contributed by him to this journal, (Vol. III, No. 1, May, 1870,) in which he advocated the use of quinine in pertussis, and stated that in his hands it had accomplished valuable results. Considering pertussis to be a neurosis of the pneumogastric nerve, caused by infectious and irritating mucus that has accumulated in the larynx and pharynx, and having found by experiments that quinine destroyed, even when highly diluted, all structures found in normal mucus, he supposed, without taking into consideration

the more intimate morphological connection, that the mucus of pertussis also would be affected in a similar manner by quinine.

In this he was not disappointed, the trial equaling his expectations.

In the clinic for children's diseases which he held in Bonn, he says: "I have treated for the past two years all the cases of pertussis, without any exception, with quinine. The best proof of its good effects is seen in the fact that those in charge of the little patients repeatedly call again for the 'bitter medicine' whenever they have succeeded, either by coaxing or force, in administering it to them. There was a most striking difference to be seen in those whom it was impossible by any means to induce to swallow the solution of quinine. In these cases the whooping-cough assumed its regular obstinate course; in the others, although living in all other respects under perfectly similar circumstances, the paroxysms were always reduced in frequency and severity."* These good results with quinine, he stated, could only be obtained by strictly observing the following conditions: "*It should be given in solution; the dose should not be too small, and should not be administered in a vehicle that will prevent it from coming in contact with the mucous membrane in its passage through the pharynx;*" and the neglect of one or all of these rules he considers the reason why other observers have seen no positive results from the use of this drug. Certainly it is not just to condemn a remedy as ineffectual when it is not employed in the proper manner.

The assumption that pertussis is a specific local catarrh, caused by a fixed contagion admitted from without, Prof. Binz thinks, admits of being hypothetically explained by the fact of adults being almost unexceptionally exempt from it. "The stronger development of the epithelium may be regarded as a protection against the affection of the mucous membrane. This greater development in children probably takes place quicker if those parts of the throat, from pertussis, have been in a hyperæmic condition for weeks, and thus it is easy to comprehend how the immunity originates after the affection has once been surmounted."†

Still another cause of pertussis has been advanced. Dr. Letzerich, of Germany, ‡ in 1871, asserted in a paper on the subject that he had discovered a form of fungoid growth which vegetates in the epithelium of the air passages, and by its irritation causes the convulsive attacks of coughing. The expectorated mucus in patients suffering from pertussis, he says, contains masses of brownish-

* American Journal of Obstetrics and Diseases of Women and Children, vol. iii, No. 1, page 8.

† Loc. cit., pages 9, 10, foot notes.

‡ Quarterly Journal Medical Science and American Journal of Obstetrics, vol. iv, page 761.

red spores, with occasional threads of mycelium, which in the latter stages of the disease becomes very abundant. These observations were made by experiments upon rabbits into whose tracheæ he introduced the fungus; in a short time the latter became affected with a noisy and violent cough—in fact, a genuine whooping-cough. The rabbits thus affected were killed and examined, and their air passages were found to contain the same fungus as that found in the sputa of human subjects; in fact, the mucus presented precisely the same appearance.

This fungus theory is certainly a very plausible and possible one, and one that even seems to be proven by the effects of therapeutical measures directed against the development of the fungus.

The fact that narcotic remedies do sometimes greatly influence whooping-cough, does not, however, weaken this latter theory, for by their use the sensitiveness of the pneumogastric nerve, and of the whole nervous system, is so benumbed as to but feebly appreciate or respond to the irritation in the pharynx and larynx.

Quinine, it is well known, has a powerfully destructive effect on true fungi and fungus germs—hence its great power over septic or zymotic affections; and why should it not influence the growth of the fungus of pertussis?

This theory of Dr. Letzerich tends to strengthen our belief in the appropriateness of Prof. Binz's treatment, for if the fungus theory is the correct one, then quinine with its destructive effects on fungoid matter may certainly be considered a most appropriate remedy.

Another advocate of the use of quinine in pertussis, a short time after Prof. Binz's views had been made public, was Dr. Breidenbach, who published a paper (noticed in *The Practitioner*, Feb. 1871, London,) on the efficacy of the hydrochlorate of quinine in a violent epidemic of 1870. In all pure cases he states its effects were really surprising, as soon as he had from precise observations determined the proper dose and mode of administration, in which latter point he thinks lies a great part of his success. The amount administered by him—the age of the subjects varying from three weeks to eight years, and the violence of the attacks being very different in different cases—varied from $1\frac{1}{2}$ to $15\frac{1}{2}$ grains. No other remedy than quinine was employed, and some of the children were freely exposed by poverty to the injurious effects of the weather. In the worst cases, he says, after the use of the remedy for forty-eight hours, the frequency and violence of the attacks diminished.

With such strong testimony in favor of the quinine treatment of pertussis, it is somewhat surprising that nothing, or very little, has been done in this country to test its value. Even in our textbooks on diseases of children, nothing is said in reference to the use of quinine in whooping-cough, and in such recent works as the last editions of Lewis Smith's and Meigs and Pepper's books,

the omission still continues, notwithstanding that the articles already referred to appeared in 1870-1 in an American journal, the only one devoted to diseases of children published in the English language. We can but trust that in the future editions the subject will receive proper attention.

Having opportunities for testing the value of anything new in infantile therapeutics, I determined after having read Prof. Binz's paper, to apply his treatment in all cases of whooping-cough coming under my care, at the two dispensaries with which I am connected, as well as in my private practice.

I did not have long to wait. On December 4th, 1871, the first case came to my class at the "Free Dispensary for Sick Children;" the following is the record of it, and five of the most striking cases.

CASE I. Annie C—, 4 years. First whooped three nights ago; since then five or six times a day; is worse at night, paroxysms very soon ending in vomiting. Ordered solution of the sulphate of quinine of fifteen grains to the ounce of water, a teaspoonful to be given every two hours. No other treatment. To return on the 6th.

Dec. 6.—Mother states that she vomited the first dose, which was given at 1 P. M., and considerable thick phlegm. Had no whoop until just before giving the evening dose at 7; also once at night. The paroxysms were not so severe. She whooped once at 9 this A. M., but much softer, without any nausea. Ordered half a tea-spoonful of the quinine solution in one of water every two hours, and to return on the 8th.

Dec. 8.—Child greatly improved in appearance. Mother states that she has whooped but once since the 6th, and that was on the same evening. Ordered to continue medicine, and return on the 10th.

Dec. 10. Has not whooped since 6th. Ordered to continue the quinine in same manner, but only three times daily for one week. To return if she whoops again. This she did not do; so she was registered as cured.

CASE II. Margaret M—, 7 years. Brought to the same institution Dec. 18, 1871. First whooped five nights ago, (Dec. 11); since then has grown worse, and now whoops almost every hour. Had an attack while in the dispensary, which was very severe, and was followed by vomiting. Ordered solution of the sulphate of quinine, ten grains to the ounce of water, a teaspoonful every two hours daily. To return Dec. 20.

Dec. 20. Vomited first and second doses, with it considerable stringy sputa, more than in previous attacks; a slight whoop occurring each time. Since then has whooped but twice during

yesterday, once during the night, and on rising this A. M. Attacks not so severe. Medicine ordered to be continued.

Dec. 24. Child has whooped but once daily in the evening since 20th. Continue treatment.

Dec. 28. Has not whooped for two days. Continue treatment for one week.

Jan. 5. No return of whoop. Discharged cured.

CASE III. Bernard W—, 22 months. Healthy child. Brought to the Demilt Dispensary Dec. 20, 1871. Whooped first on the previous evening, since then two or three times. Ordered quinine in solution, five grains to the ounce, a teaspoonful every hour.

Dec. 24. Child whooped but twice since taking the quinine on the same night, Dec. 20, and vomited the first three doses; with them considerable tough sputa. Continue treatment.

Dec. 28. No return of the whooping since the night of the 20th. Discharged cured.

CASE IV. Albert F—, 10 years. Was brought to my office by his father, Jan. 3, 1872; he having whooped twice during the preceding night. Ordered quinine sulphate, ten grains to the ounce, a teaspoonful every hour. To call in two days.

Jan. 6. Whooped once very slightly in the night of the 3d. Not once since. First dose nauseated; coughed up considerable thick phlegm after first few doses. Ordered to continue the quinine for one week. No whooping occurred during that period.

CASE V. George F—, 4 years. Brought to the Demilt Dispensary Jan. 11, 1872; having had the whooping-cough for the past two weeks. Paroxysms occur several times daily, and so frequent at night as to keep all awake. Vomits frequently, and shows markedly the effects of the disease. Ordered solution quinine, ten grains to the ounce, a teaspoonful every hour during the day, and at night when awake.

Jan. 13. Much improved, the paroxysms not lasting so long or being so severe; ending at first in coughing up thick phlegm, but not so much now. Had three attacks during the night. Continue treatment.

Jan. 17. Has greatly improved; has not whooped for two days until this morning, when his mother thought he did. Ordered to continue the quinine.

Jan. 23. Has not whooped since last visit. Is "wonderfully well," as the mother expressed it. Was not again seen.

CASE VI. George W—, 3 years. Came under my care Feb. 24, 1872. Had two whooping attacks during preceding night, and once on the morning of visit. Is in good health otherwise. Ordered quinine, ten grains to the ounce of water, a teaspoonful every hour.

Feb. 26. Whooped twice on the 24th, and once yesterday noon, though not so severely, and easily coughed up thick mucus. Last night had but one severe attack of coughing, but did not whoop.

Feb. 28. Whooped once very slightly night before last; none since.

Feb. 30. Has not whooped since last visit.

March 3. Has not whooped since the 28th. Ordered to discontinue the quinine, and to be brought to me should the whooping return. The child was not again seen, and I subsequently learned that the whooping did not return.

The above six cases have been selected out of sixteen cases of pertussis seen by me during the past year, in which quinine was the only remedy used; the remaining ten presenting similar histories. Out of the sixteen cases, the shortest cure was effected in one day, and the longest in twenty days. In but two cases have I been disappointed in the efficacy of the quinine. They were two dispensary cases; and from the fact that one, a little girl, was under the care of her father, and the other was a "farmed-out" infant of twelve months, I am inclined to attribute the failure to the negligence of those in charge of them, the quinine not being given to them as frequently as ordered. In both these cases, however, there was some palliation of the paroxysms.

In regard to the administration of so disagreeable a remedy, I found that, though frequently there was some difficulty in getting the children to take it, yet it was exceptional for them to resist after the first two or three doses, and in only a very few did it cause vomiting. The direction to give the children a piece of an orange or a little sugar five or six minutes after taking the quinine, doubtless, had considerable to do with their seeming willingness to take the "bitter medicine."

As to how the quinine so very remarkably influences this most troublesome and severe disease several theories might be advanced. If the fungus theory of Dr. Letzerich be the correct explanation of pertussis, then we can readily account for its efficacy, in the already mentioned fact of its destructive influence on fungoid development, and consequently its power consists in removing the cause of local irritation, which gives rise to the reflex phenomena evidenced in the whooping.

The above theory and explanation carries with it considerable weight, and, it appears to me, should be accepted until disproved, or a more convincing pathological explanation of pertussis is given.

For my own part, I accept it, and in consequence consider pertussis an affection of the mucous membrane of the pharynx and larynx, and the "whooping" as simply reflex. And the fact that almost all remedies given for other than their local effects, have either signally failed or but partially succeeded, strengthens this hypothesis.

Nevertheless, I do not attribute the rapid cure effected by quinine to the simple destruction of the fungus, but also to its nauseating bitter taste. In every case of pertussis, it will be conceded by all, there is an abnormal secretion of a thick tenacious mucus from the mucous membrane of the pharynx, (whether this secretion is due to simple catarrhal or reflex hyperæmia, or to fungoid development, it matters not,) which may or may not excite a paroxysm of whooping, but which certainly aggravates and prolongs the latter, as may be proved by the fact that the paroxysms invariably cease the moment this mucus is removed either by the coughing, vomiting, or the finger. Now, the effect of a small amount of a solution of quinine, when taken into the mouth and swallowed, is instantly, from its bitter and nauseating taste, to excite a free secretion of thin mucus from the buccal mucous membrane and the salivary glands, and this softens and renders easy of dislodgment the tenacious mucus referred to. The frequent repetition of the quinine, therefore, keeps up this free secretion, and thus prevents the mucus from becoming tenacious and difficult of dislodgment. At each act of coughing, therefore, the accumulated mucus is readily loosened and expectorated, and unobstructed inspiration obtained. The rapid loosening of the cough, the briefness of the attacks in comparison with those previous to the administration of the quinine, and the easy expectoration, certainly tend to favor the correctness of the above theory.

The failure of quinine against pertussis, in the hands of others who have tried it, is undoubtedly to be attributed to the manner of its administration—either in large doses at long intervals, or in the form of pills; in either case, therefore, the local effects upon which I place the greatest value are not obtained. While writing this paper, a friend, whose practice is largely amongst children, informed me that he met with no success with quinine in pertussis; but on his informing me that he had always given it in large doses, morning and evening, I attributed his failure to that fact.

The object with which I have written this paper is to call the attention of the profession to this treatment of pertussis, and invite them to give it a careful trial, feeling convinced that if the following rules are carefully observed, few, if any, will be disappointed in their results.

1. Give the quinine (sulphate or hydrochlorate) dissolved by acid in pure water only. For children under 3 years, from gr. v. to gr. viij., and for older children and adults, from gr. x. to gr. xij. to the ounce.

2. Give not less than a teaspoonful *every single*, or, at the longest, every two hours during the day, and whenever cough comes on in the night.
3. Give nothing afterward for some minutes to destroy the taste or to wash out the mouth.
4. Continue giving it notwithstanding the first doses may be vomited.
5. Be sure that the quinine is pure and thoroughly dissolved.

Appendix:—Since the above paper went to press, two cases of whooping have come under my care. One, a boy of three years, who was brought to my clinic in the University on Feb. 8; had whooped severely four and five times daily, and as often during the night. He had an attack in the presence of the students in the lecture-room. He was ordered quinine gr. v. to the ounce of water, a teaspoonful every hour daily. No other treatment. He was again brought to the clinic the following Saturday, Feb. 15, when his father stated that the attacks at once grew less severe and frequent after taking the quinine, and that on Wednesday day and Thursday (fifth and sixth days) he whooped but once in each twenty-four hours, very slightly. The medicine gave out on Thursday evening, however, and since then the whooping has increased in severity and frequency. The other case was a little girl two years old, who was brought to the Free Dispensary for Sick Children on Feb. 11. She had whooped for three days, five or six times during the day and night. Was ordered quinine as in the preceding case. Was again seen Feb. 15, at my clinic, and shown to the class. In this case the mother confessed to having been negligent in giving the medicine, not having given it oftener than four or five times during the day; and yet she said the child had greatly improved, and had whooped but once or twice during the night time only since taking the quinine. Both of these cases were also seen previous to and after treatment by Dr. P. B. Porter and Dr. Beverly Robinson, and being the last cases under my care, are a valuable addition to the preceding report of the six out of my first cases.

In the foregoing paper I wish to be understood as advocating the value of quinine in curing the "whooping" chiefly, the cough in many of the cases lasting for some time after the whooping ceased, and which requires the usual treatment for bronchial catarrh.—*American Journal of Obstetrics and Diseases of Women and Children*, Feb., 1873.

On the Operative Treatment of Pleuritic Exudations. By CH. RAUSCHENBERG, M.D., Atlanta, Ga.

Dr. Ludwig Lichtheim, Assistant at the Surgical Klinik at Halle, is the author of a valuable article on this subject, the most important points of which are contained in the following abstract:

Dr. Lichtheim first calls attention to the fact that the improved pathological conceptions of the last ten years, with their correcting and remodeling influences on therapeutical principles generally, have also brought about a material change in the therapeutical efforts of physicians in the treatment of local morbid conditions occurring in the course of internal diseases, and that the old faith in the efficiency of general treatment for the removal of such conditions is fast giving way to an improved system of local therapeutics, in which operative surgery is destined to occupy an important position.

This tendency of the age has affected the operation of thoracentesis and its therapeutical relation to the treatment of pleuritic exudations very essentially, and has demonstrated that it must henceforth be looked upon not as a last resort, or a mere palliative measure, but as a surgical remedy of very great and very general curative usefulness in the treatment of this morbid condition.

Heretofore this operation has almost exclusively occupied the position of a merely palliative measure. Excessive danger of suffocation, caused by the compression of the lung on the diseased side and impeded expansion of the other by the misplaced heart and mediastinum, on the one hand, and the danger threatened from the burrowing of pus when bulging of the intercostal integuments indicated pleural abscess on the other, have so far been, in a majority of instances, the phenomena under which thoracentesis has been performed, as they were the only generally-accepted indications under which this operation was considered applicable.

As a curative measure, aiming directly at the improvement of the morbid condition *per se*, this operation—although simple, safe, painless, and often life-saving—was first practiced and recommended in France by the pupils of the great Trousseau, one of its earliest and most zealous advocates in this sense; but it has only acquired the general acceptance of the medical world in the last few years. The labors of Kussmaul and Bartels, in Germany, have, however, the exclusive merit of having first clearly demonstrated the different relations which this operation as a remedy bears to the different pathological sequels of pleuritis, and have established the leading and now generally accepted principles which govern its use and execution.

The proper use of thoracentesis for the treatment of pleuritic exudations is based upon a correct understanding of the differences in the treatment required by purulent effusions, empyemata, on the one side, and that of non-purulent, merely serous effusions, on the other.

Resorption of the effused serum frequently takes place; but complete resorption of pus, constituting an empyema of any recognizable size, is a very doubtful occurrence, which has at least never been established by actual observation; while it is a well-known pathological fact that purulent deposits remain within the pleural cavity often for very long periods of time, either as fluid pus or a more or less inspissated substance, subject to or engaged in a process of cheesy degeneration, according to the degree of separation of the fluid parts of the pus from its solid morphological elements by resorption of the former.

The possibility of a perforation of the thorax or the pulmonary pleura and lungs, by which the empyema might be emptied and the disease spontaneously cured, cannot be taken into consideration when the question of the necessity of thoracentesis is to be decided, because perforation, if it does take place at all, occurs generally so late, and (particularly when in the direction of the lungs) with such a slow, imperfect and harassing evacuation of the pus by coughing, and such wasting febrile phenomena, that, instead of furnishing a cause for the delay of the operation, it increases the necessity of its performance in order to give additional and more ready drainage to the pus in the direction of the surface, and thus to shorten, and thereby to deprive, the curative process of nature of its dangerous consequences to the organism in general.

After thus establishing the very small probability of a spontaneous cure of empyema, our author arrives at the conclusion that *the accumulation of a sufficiently large quantity of pus in the pleural cavity to admit of plain recognition, furnishes a direct indication for its removal*; and that the old maxim, "*Ubi pus ibi evacua*," deserves full recognition in these cases.

An early and correct diagnosis, establishing beyond a doubt the existence of a purulent accumulation within the pleural cavity, is therefore imperatively necessary in cases of that kind.

If the usual symptoms of œdema of the affected side of the thorax—redness of the skin in that region, the characteristic type of fever with high evening exacerbations, and more or less developed periodical rigors—are wanting, which is sometimes the case, while the physical exploration of the thorax indicates a pleuritic effusion, puncture of the thorax with an exploratory trocar will always decide whether or not empyema exists.

In all doubtful cases the character of the accumulated fluid should thus be ascertained at once, and if pus is found, thoracen-

tesis should be performed, as delay will always diminish the probability of a recovery.

The frequent incurability of the fundamental disease which has caused the empyema and the high fever connected with it, should never delay, much less set aside, the operation. The effective removal of the accumulated pus will, in far the majority of instances, more than any other therapeutical measure, not only give comfort to the patient for the time he can live, but will frequently protract the fatal issue a longer or shorter period of time, if it does not accomplish a cure, and will always either lessen or check the fever with its wasting influences on the system, as the latter is almost invariably the consequence of the process of supuration going on within a closed cavity of the organism. The operation within itself is harmless, and if death has followed it in a few instances, it is very probable that it was caused by a continuation of the morbid conditions which now and then occasion sudden death in large pleural effusions.

To prevent the admission of air when the exploring trocar is used, it is always sufficient to let the patient take a full inspiration and retain his breath the moment the trocar is withdrawn.

Our author acknowledges no valid contra-indication of thoracentesis, but such a degree of debility as would necessarily result in death without the operation in a very short time.

The governing idea in its performance must be to have an opening amply large enough to admit free and perfect exit of the pus, and prompt and efficient cleansing of the cavity for a sufficient length of time. The mere puncture with the trocar and canula, with exclusion of the air, does not answer the purpose. It creates too small an opening; the clearing of the cavity by syringe, even through the retained canula, is too tedious, difficult and incomplete, and this method has therefore been almost entirely abandoned, and the operation by free incision—which, although a little more difficult to perform, is certainly a no more dangerous operation than the other—is now generally preferred.

First, an incision, one and a half to two inches long, through the integuments, right in the middle of an intercostal space to avoid the intercostal artery, then division of the muscles, layer by layer, on the grooved probe, is made. If a smaller artery bleeds, the hemorrhage is stopped by digital pressure, but the final perforation of the white, glossy pleura, which either bulges into the aperture of the incision or remains stiff and hard, is not made until all hemorrhage has been entirely arrested, as even an insignificant quantity of blood mixed with the pleural contents, gushing forth through the pleural opening, frequently causes an erroneous impression of danger. If the nature of the contents of the pleural cavity should not have been satisfactorily ascertained before, the insertion of a small trocar in one of the angles of the wound at

this stage of the operation will remove any existing doubt. A free pleural incision, corresponding in size with the superficial one, finishes the operation.

The best locality for the incision, in order to avoid the obstruction of the opening by the previously depressed diaphragm, is the fifth or sixth intercostal space between the mammillary and axillary lines.

Marked and immediate relief follows the operation, the respiration becomes free and easy, the fever abates, and this relief remains permanent; while, if mere puncture of the thorax has been made, the old condition of affairs, on account of imperfect drainage of the empyema, is re-established in a very few days, and the patient becomes clamorous for a repetition of the operation.

The after-treatment must necessarily provide for the fulfillment of the general indications of a large abscess. The cavity must be well cleansed, and the pus thereby sufficiently removed twice a day; as decomposition of the pus—manifested by a rising of the pulse and the bodily temperature frequently beyond the degree existing before the operation—takes place within twenty-four to forty-eight hours after the operation in a large number of cases, the pus at the same time assuming a thin, ichorous appearance, and more or less fetid odor. Dr. Lichtheim has made it a uniform rule to inject into the thoracic cavity twice a day, through a flexible tube, a solution of carbolic acid of one part to one hundred parts of water containing a small quantity of glycerine in order to keep the former in solution, for the purpose of arresting the secretion and decomposition of the pus. He has never observed any unpleasant symptoms under this treatment, although the urine of his patients showed by its darker color that a portion of the carbolic acid was resorbed. Subsulphate of soda, permanganate of potash and iodide of potash in solution—recommended, the first by Kussmaul, the last by Trousseau, and afterwards by Quincke—have manifestly failed in his hands to avert the decomposition of the pus, while the carbolic acid has proved very reliable for that purpose. The fluid to be injected should be warmed within the neighborhood of the usual degree of the bodily temperature before it is used. The half-sitting posture is most favorable to the performance of this procedure, and it is therefore advisable to put the patient in that position, and let him remain in it for some weeks after the operation. As the healing of the incision proceeds, the difficulties which attend thoracentesis by mere puncture from the very commencement, begin to arise and annoy the practitioner. The opening loses its lengthy form, becomes round and smaller, until finally, in spite of the continued application of good large wicks from the beginning, and in spite of repeated dilatation of the opening with laminaria and sponge tents, it will not allow the fluid injected through the permanently remaining flexible catheter to

run out by its side. Then it is time to insert a short double tube in place of the catheter, so that the fluid injected by one of its channels can run out again through the other.

Roser and Quincke have introduced a method and apparatus by which the pleural cavity is washed out by the introduction of air and water alternately, one driving out the other. Dr. Lichtheim describes the apparatus and its mode of operation; but as in our judgment a Davies syringe, attached to one-half of the double tube, resting in the thoracic opening, permits, in a much simpler manner, the alternate introduction of air or water into the thoracic cavity by respectively leaving the suction end out of or putting it into the fluid to be injected, it appears unnecessary to dwell on their mode of accomplishing this object.

Where the edges of the thoracic opening do not hermetically close round the double tube, this method of cleaning the thorax cannot, of course, be used. Quincke substitutes in such cases a gutta percha ring pessary, in the center of which the double canula is hermetically inserted. It admits the exclusion of air by being pressed against the walls of the thorax. He has, in this manner, frequently washed out the pleural cavity immediately after the operation, and claims that it is preferable to the common mode, as it does not require the patient to turn on his side. Changes of position, immediately after the operation, are considered by him fraught with some danger, and he refers the death of one patient to them as the cause. Dr. Lichtheim prefers the common mode of washing out the cavity, through a large opening, and reserves Quincke's method for those cases where the small size of the opening makes it necessary.

The extent to which the several thoracic and neighboring organs, and particularly the lungs, are restored to their normal position, size and physiological function, the cavity diminished and the normal appearance of the thoracic wall re-established, depends upon the age of the patient and the duration of the disease before the operation was performed.

The inclination of the opening to close up manifests itself by the fact that the secretion becomes thin and scant, diminishing to a few drops of a yellow watery fluid during the whole day. On removal of the catheter under these circumstances, it closes up rapidly.

Frequently, however, the reparative process is suspended, the general condition of the patient remains favorable, but the cavity still continues to secrete pus without any prospect of a change. Dr. Lichtheim recommends, under these circumstances, the suspension of the disinfecting injections, as long as the condition of the pus does not demand them, and the use of stimulating ones in their stead, for instance, Lugol's solution, containing one per cent. of iodine, or stronger if required.

In cases where, in consequence of the duration of the empyema, the lungs have lost their faculty to expand, all these means are fruitless, and a permanent thoracic fistula remains.

The establishment of well-defined indications for the operative treatment of non-purulent pleuritic exudations, with exception of those cases where immediate danger of suffocation demands thoracentesis, is much more difficult.

A consideration of all the factors upon which the resorption of such exudations depends—to wit: the acute or chronic character of the disease which has caused it, the condition of the blood of the patient, the character of the exuded fluid, the degree of pressure existing in the pleural cavity, etc.—teaches that it is an entire impossibility to predict, with any reasonable degree of accuracy, the final termination of a pleuritic exudate, and leaves us only in possession of one undeniable fact, to wit: *that large pleuritic exudates are generally resorbed with great difficulty, if resorbed at all, and are, therefore, often adapted to operative removal.*

Dr. Lichtheim further considers that thoracic puncture, properly practiced, is an entirely harmless operation, and states most positively that in a very large number of operations performed or witnessed by him, only in a few instances, after repeated punctures in the same individuals, the fluid became slightly turbid, and contained, microscopically examined, a few more cells; but that it has not been followed, within the scope of his personal observation, in a single instance, by acute purulent degeneration of the exudate.

He arrived at the conclusion that in robust individuals *extensive pleuritic exudations*—where resorption, although not impossible, would evidently be very tedious, and too slow to prevent the accumulation of injurious consequences to the organism—*should be removed by thoracentesis if within the first or second week after the cessation of pain and fever the exudate does not begin to diminish.* The quantity of the exudate can only be correctly estimated, not by its level alone, but by the expansion of the affected side of the thorax, the depression of the diaphragm, the displacement of the mediastinum, and, in left-sided effusions, by the considerable displacement of the heart to the right. In exudates following phthisis or chronic nephritis, the operation is contra-indicated unless immediate danger of suffocation demands it.

One method for the removal of non-purulent pleuritic exudations is now generally accepted. It is that of puncture of the thorax with exclusion of the air, which will enter with each inspiration as soon as the pressure within the pleural cavity is no greater than that of the atmospheric air. This exclusion of air, although the entrance of a few air bubbles by some imperfection of the apparatus is of no consequence whatever,

is essential for the prevention of suppuration within the pleural cavity.

The number of contrivances which have been invented to accomplish this object is not inconsiderable, and several of them are most probably known to every practitioner. Piorry's method is probably the most preferable one.

Dr. Lichtheim warns against the propositions of Hoppe Seiler, who, in order to accomplish complete evacuation of the serum, thought it proper to introduce a diluted solution of chloride of sodium into the thoracic cavity, by aspiration through a gutta-percha tube, to occupy the place of the remaining serum. He considers it by no means certain that such operations, to which the performance of thoracentesis in the warm water bath below the surface of the water belongs, furnish better results than the simple puncture without aspiration of fluid; but holds that if evacuation of the serum by thoracentesis is not followed by a new accumulation of fluid, the remaining serum will be re-sorbed, while the puncture with aspiration proposed by Hoppe Seiler, is not so absolutely harmless as the simple puncture alone, but induces, according to the history of his cases, septic decomposition of the contents of the pleural cavity (piopneumothorax).

When a large trocar is used, the escape of the serum should be frequently interrupted to prevent rupture of the fine capillaries of the newly-formed connective tissue, and a bloody color of the escaping serum should always induce the operator to exercise caution in this direction.

Dr. Lichtheim performs thoracentesis by puncture at the same locality at which he operates by incision for empyema. The simplicity of the operation excludes the possibility of serious accidents. If pus emanates from the canula after the withdrawal of the trocar, the operation by incision should be performed at once. Hemorrhagic exudations, being an evidence of tuberculosis or scirrhus of the pleura, establish an unfavorable prognosis, and where they are found to exist, the escape of the fluid should also be arrested, unless symptoms of suffocation demand its removal.

As soon as the expansion of the lungs commences, an irritation of the small bronchii and vesicles, by the air entering the lungs, causes an obstinate and harassing cough. Hypodermic injections of morphia before the operation will measurably prevent this trouble. Closure of the puncture, which always heals by first intention, is the only dressing needed. Great relief and no fever, or increase of it, where it existed before, follow the operation in the largest number of cases; and, even in the most unfavorable instances, febrile phenomena hardly ever occur, while the effusion, instead of diminishing, reaches within a few days again its former extent. In these cases the patient, who has once

experienced the great relief following the operation, wants it repeated; but it is well enough not to be hasty in complying with his request.

Acute purulent degeneration of the remaining serum occurs very seldom; when it does, the symptoms of empyema set in, and the treatment of that condition becomes necessary.—(*Volkman's Klinische Vorträge*, No. 43, October, 1872.)—*Atlanta Med. Journal*.

Neuralgia of the Testicle.

Several years have now elapsed since Dr. Lazarus, of Cernowitz, reported a number of instances in which spermatorrhœa was accompanied by neuralgia of the testicle. Since then, he has continued to give especial attention to cases of this nature which have come under his notice in hospital and private practice. He finds that in a very limited number of cases only is the entire testicle affected by neuralgic pains; these are commonly limited to the *epididymis*, more particularly the superior portion, together with a part of the *vas deferens*. The left testicle is more frequently affected than the right. The precise pathological changes which take place in the diseased parts have not yet been satisfactorily made out. In a few instances, however, there has been noticed a moderate swelling of the organ, with slight enlargement of the bloodvessels. The predisposing causes of this affection do not differ from those of ordinary neuralgia. It may be the result of idiopathic or traumatic inflammation, or exposure to cold and dampness, or may be induced by the mechanical pressure of some adjacent tumor.

The most common cause, however, of this form of neuralgia is long-continued sexual continence, so that, as would naturally be inferred, the list of this class of sufferers is made up very largely of bachelors. At times, it appears to be a concomitant of approaching impotence, caused here by the engorgement of the bloodvessels and seminal ducts. In such cases, marked relief has been known to follow a natural evacuation of these vessels. In other instances, neuralgia of the testicle makes its appearance in the case of broken down individuals suffering from dyspepsia. Still another cause is the induration which not unfrequently remains behind after a protracted inflammation of the epididymis. In two instances, neuralgia of this organ was found to follow the injection of a strong solution of permanganate of potash and sulphate of copper in the course of a treatment of gonorrhœa. Renal calculi, during their passage along the ureter, may also lead to an attack of this form of neuralgia. In one case seen by Dr. L. the affection was caused by a fall from a lofty scaffolding, by

which the lumbar portion of the spinal column received severe injury, resulting in paralysis of the lower extremities and eventual death.

Finally, neuralgia of the testicle is not unfrequently an accompaniment of varicocele. The affair generally begins with a sensation of pain in the upper portion of the epididymis, which continuing without remission, would point to commencing inflammation of that organ, were it not for the absence of the ordinary signs of inflammation, such as redness and swelling. All doubt as to the real nature of the trouble is very soon removed, however, by the change in the severity of the pain, which now comes on in paroxysms of a burning, boring character, accompanied at times by nausea and vomiting. This pain is renewed and aggravated by motion, or whenever any pressure is applied to the scrotum. Cold applications afford no relief whatever to the sufferer; heat, on the other hand, serves to alleviate the pain, particularly when applied in the form of warm baths. This fact will explain why the patient finds himself more comfortable in heated apartments, such as the ball-room or theatre; and also why the paroxysms are less severe in summer than in winter.

Among the agents recommended for the relief of this form of neuralgia, Dr. L. speaks (*Wiener Med. Presse*), most highly of sulphate of zinc, given as follows:

- R. Zinci Sulphatis, gran. tria;
Aque Destillate, unc. quinque;
Aque Laurocerasi, drach. unam;
Syrup. Cort. Aurantium, unc. semis.

M. Dose—Tablespoonful three times daily.

He also advises the daily injection into the posterior wall of the scrotum of a small quantity of the solution of sulphate of zinc, having the strength of one-half grain to the ounce. In obstinate cases it may be necessary to resort to castration.—*The Clinic*.

Our neighbors of the *Northwestern Christian Advocate* are responsible for the following "copy" which we give as we swallow our theology, without note or comment:

"We give some statements recorded in the *Gazette Hebdomadaire* taken from *Virchow's Archives*, a medical journal published at Berlin:

"A soldier who had killed the colonel of a regiment in cold blood, and whom the severity of Prussian military discipline would have caused to die a hundred deaths had it been possible, was deliberately handed over to the surgeons, by sentence of court-martial,

and was confined in a strong room in the military hospital, entirely in the dark as to the fate which awaited him. He was kept there ready for an emergency which did not fail to occur. A keeper of a beer-cellar in Leipzig, a man resembling, in many respects, the condemned soldier, and who had been seized with acute inflammation of the heart, or rather of its investing membrane, was brought to the hospital to die of that incurable and promptly fatal malady. No sooner had the anticipated death taken place than the dead saloon-keeper was placed on a table by the side of another operating table, on which was the chloroformed but living body of the soldier. Two surgeons, with assistants, proceeded alike in both cases to divide the scalp over the summit of the skull from ear to ear, turn back the divisions, and remove the skull-cap by incisions passing around the skull like a crown. In the soldier, whose carotid arteries had been prepared for compression, these vessels were clamped so as to prevent hemorrhage, and but a few drops of blood were lost during the entire operation. In each the dura-mater was incised, and the hemispheres of the brain were removed by an incision with a sharp, thin-bladed knife, passing above the cerebellum, or a narrow portion of about two inches in diameter called the *crura cerebri*. The brain of the saloon-keeper, which was sound, the heart disease having left it intact he having been sensible to the last, was transferred to the skull of the soldier, and by an ingenious contrivance, fully detailed in the *Gazette*, the continuity of the arterial and venous tubes was established. The greatest care was taken in securing the natural adaptation of the parts to a fraction of a line, and the skull, having been replaced simply, was held down and in position by the scalp, which was drawn over, and its edges confined by strips of adhesive plaster, and over all was placed a bandage. It was not until several days had passed that the pressure upon the carotid arteries was entirely relieved, although before the skull was replaced the flow of blood in the vessels of the brain was proved to be restored. The chief fear was from the results of inflammation and suppuration, but fortunately neither ensued, and the wounded parts healed kindly. There was from the first no difficulty in feeding the patient, nor was difficulty anticipated, for it is well known that in puppies and kittens in which the entire brain has been removed, sucking and swallowing go on as well as before the operation, and in this case the nerves which preside over deglutition and digestion were far below the point of section. The patient remained in a sound sleep for two weeks, as in a case of apoplexy, the circulation, digestion, and all the vegetative functions of life being uninterrupted. The gradual union of the parts was shown by faint but gradually increasing movements of the limbs, of the jaws, and of the muscles of expression in the face. Speech did not become possible until the close of the third week, and then it was hesitating,

stammering, as a child learns. Although it was evident that the patient tried to utter words and sentences, it was very gradually that the power of intelligible articulation returned.

"The *Gazette* contains the report in a tabular form of the increasing voluntary power over the arms and hands, as measured from day to day by the dynamometer, the measurements given in kilogrammes; also the daily temperature of the limbs, as shown by the thermometer in degrees of centigrade; also the measure of returning sensibility of the fingers and lips, as given by an instrument called an æsthesiometer; but I omit these, as your readers will be interested in the main facts only.

"When speech became intelligible it was found that the soldier, as he seemed, had forgotten entirely his military training and discipline; on the other hand he told, at a formal examination, in the presence of a number of witnesses, the prices of all the wines and beers, such as the saloon-keeper had been in the habit of buying and selling, manifesting the unimpaired cerebral activity of the latter. His memory recalled the saloon-keeper's relatives, friends, and customers, whom he called by name. The soldier had been ugly, taciturn, revengeful; he now had the saloon-keeper's frankness, and even garrulity, in spite of his stammering utterance. He was totally blind. Although the nerves of smell and sight had been approximated in the operation, they failed to unite. It was both sad and strange to see and hear the soldier groping in his infirmity of blindness and giving proof of all the patient endurance and goodness of heart, which had made the saloon-keeper deservedly esteemed and prosperous. These are the main facts in the case as far as detailed in the *Archives*, but the subject of experiment presents so many important problems of the relation between blood and brain, of heart power and nervous energy, that we may well be assured that no facts of interest in the changed condition of the culprit will be permitted to escape notice and record. A grave point of discussion is, whether he must still be considered a criminal and suffer execution as a guilty soldier, or shall be pensioned and liberally cared for in his infirmity as a guiltless and much suffering beer-seller. Public sentiment is divided. The Emperor William's professors of metaphysics in the Emperor's universities, say it is clearly a case of Ego and non-Ego, and the people seem willing that the matter should rest there as far as the metaphysical aspects of the question are concerned."

Editors' Book Table.

[NOTE.—All works reviewed in the columns of the CHICAGO MEDICAL JOURNAL may be found in the extensive stock of W. B. KEEN, COOKE & Co., whose catalogue of Medical Books will be sent to any address upon request.]

BOOKS RECEIVED.

The Microscope and Microscopical Technology: a Text Book for Physicians and Students. By Dr. HEINRICH FREY, Professor of Medicine in Zurich, Switzerland. Translated from the German and Edited by GEORGE R. CUTTER, M.D., Clinical Assistant to the New York Eye and Ear Infirmary. Illustrated by 343 Engravings on Wood; and Containing the Price Lists of the Principal Microscope Makers of Europe and America. From the Fourth and last German Edition. New York: William Wood & Co., 27 Great Jones Street. 1872. Pp. 658. Cloth, \$6.00.

In the January No. of the JOURNAL is briefly noticed the reception of this book. Since some one of our professional friends borrowed and forgot to return our copy of Beale's "How to Work with the Microscope," our library has mourned over a *hiatus valde defensus*. There was an "aching void." But all evils have their compensations. In this book of Prof. Frey we find the whole matter "posted up to date." The volume is brought out in elegant style, and, as it should be, is profusely illustrated. The arrangement is satisfactory in every particular, giving first, the Theory of the Microscope, then successively: Apparatus for Measuring and Drawing; the Varieties and Modes of Testing; Use and Methods of Examination; the Preparation of Objects; Fluid Media and Chemical Reagents; Methods of Staining, Injecting, etc.; Mounting and Arrangement of Objects—the eleven concluding chapters being devoted to a careful delineation of the microscopy of the fluids and solids of the human body. A price list of the leading manufacturers follows the index. The more carefully we examine this book, the more thoroughly are we pleased and delighted with it.

The microscope is now the indispensable adjunct of the physician's study, but without instruction in its use, the practitioner will find himself sadly disappointed in using it.

Club-Foot: Its Causes, Pathology, and Treatment. Being the Essay to which the Jacksonian Prize for 1864, given by the Royal College of Surgeons, was awarded. By WM. ADAMS, F. R. C. S., Surgeon to the Northern Hospital, and to the National Hospital for the Paralyzed and Insane, etc., etc. With one hundred and six Wood Engravings, and six Lithograph Plates. Second Edition. Philadelphia: Lindsay & Blakiston. 1873. 8vo. Pp. 464. Cloth, \$6.00.

This is a superb work and should be in the hands of every surgeon in the country, as it is by far the most complete and instructive treatise on the subject. By the assistance of the numerous and capital illustrations everything is presented in the most perfect manner to the eye and the understanding. The present edition has been carefully revised, many chapters materially added to, especially the one on Preparation of the Tendons, and five new lithograph plates added.

Contributions to Mental Pathology. By J. RAY, M.D., Author of "Medical Jurisprudence of Insanity," and Mental Hygiene. Boston: Little, Brown & Company. 1873. Pp. 558.

Most of the present volume has already appeared in print, and the general opinions of Dr. Ray are well known to the professional public. The matter of which it is composed, however, has been thoroughly revised, a scientific arrangement adopted, and a portion of new material added. It is well considered, well digested, and, while it is a very important treatise for the professional man, it will be found well worthy the attention of the intelligent general reader.

Manual of Chemical Analysis as Applied to the Examination of Medicinal Chemicals. A Guide for the Determination of their Identity and Quality, and for the Detection of Impurities and Adulterations. For the Use of Pharmacutists, Physicians, Druggists, and Manufacturing Chemists, and of Pharmaceutical and Medical Students. By FREDERICK HOFFMAN, Ph. D., Pharmaceutist in New York. New York: D. Appleton & Co., 549 and 551 Broadway. 1873. 8vo. Pp. 393.

This is one of the most useful books of the season. The information it contains has been collected from a wide variety of sources inaccessible to most readers. It has been compiled with special reference to the latest Pharmacopœias of the United States, Great Britain and Germany.

The work is divided into two parts, the first of which treats of Operations and Reagents; Reagents; Course of Qualitative Analysis, and Volumetric Analysis; the second, discusses the Medicinal Chemicals and their Preparations in detail. Numerous illustrations are given throughout the volume, and to the whole is appended a series of Tables of great practical service, and a copious Index. We cannot too highly recommend this treatise to our readers. It fills a want we have ourselves long experienced.

Illustrations of the Influence of the Mind upon the Body, in Health and Disease. Designed to Elucidate the Action of the Imagination. By DANIEL HACK TUKE, M.D., M.R.C.P., Joint Author of "The Manual of Psychological Medicine," etc., etc.

"There is not a natural action of the body, whether voluntary or involuntary, that may not be influenced by the peculiar state of the mind at the time."—JOHN HUNTER.

Philadelphia: Henry C. Lea. 1873. 8vo. Pp. 415. \$5.50.

A book very much needed—worth more, to the thoughtful and judicious physician, than a whole shelf-full of volumes on *Materia Medica*. Dr. Tuke is already well known, to the reading portion of the profession, through the excellent joint treatise, by Dr. Bucknill and himself, on *Insanity*. The present essay is more limited in its scope, but brimful of matter indispensable to the professional scholar. The author has collected, from a wide variety of sources, cases, authentic in character, illustrative of the influence of Mind upon the Body. These are supplemented by a great number falling under his own observation, and the whole systematically arranged, in accordance with modern physiological and psychological ideas. The mental influence is shown as causing derangement of sensation, motion, and the organic functions, and its therapeutic importance pointed out. The next effort is to ascertain the channels of this influence, and finally to elucidate, as fully as possible, the exact nature of what is usually designated the Imagination. The book is methodically divided and written in a pleasing style, devoid of abstract and foggy metaphysical speculations, clear and instructive. To employ a phrase we remember to have seen used before, "No library can be complete without it." Most certainly no one can rise from its perusal without a feeling of satisfaction with the book and gratitude to the author. Incidentally, we have noticed, that whilst lying upon the office table,

with the other literary, scientific and professional works, latest productions by the press, this one has been the most noticed of all, and solicitations to borrow it most frequent.

Fistula, Hemorrhoids, Painful Ulcer, Stricture, Prolapsus and other Diseases of the Rectum: their Diagnosis and Treatment. By WILLIAM ALLINGHAM, F.R.C.S.E., Surgeon to St. Mark's Hospital for Fistula, etc.; late Surgeon to the Northern Hospital. Second edition, revised and enlarged. Philadelphia: Lindsay & Blakiston. 1873. Pp. 265.

This is a capital addition to the literature of the topics mentioned in the title. It is well written, in good vigorous English, and we fully endorse the opinion of a contemporary, that there is "no book on this special subject that can at all approach Mr. Allingham's in precision, clearness and practical good sense."

A Treatise on Apoplexy, Cerebral Hemorrhage, Cerebral Embolism, Cerebral Gout, Cerebral Rheumatism, and Epidemic Cerebro-Spinal Meningitis. By JOHN A. LIDELL, A.M., M.D., Prof. of Anatomy in the National Medical College, Washington, D. C.; formerly Surgeon to Bellevue Hospital, New York, etc., etc. New York: Wm. Wood & Co., 27 Great Jones Street. 1873. 8vo. Pp. 395.

Dr. Lidell elaborates in this volume the ante and post-mortem histories of sixty-two cases of cerebral diseases. Of these, forty-four are original, and besides them many original cases are briefly cited. A special chapter is devoted to *Infantile Apoplexy*, one to the so-called *Pulmonary Apoplexy*, and the closing chapter discusses Cerebro-Spinal Meningitis, which latter disorder he very properly considers a local "inflammation," excited by a specific poison. The author informs us that he started out with the purpose of writing nothing more than an article, or series of articles, for the *American Journal of Medical Sciences*, but the matter soon accumulated to such a bulk that he abandoned that idea and concluded to present it in book form. The result is the volume before us, which is rich in well prepared material for study. Aside from his original descriptions and views, the author cites numerous authorities, which will give the reader an excellent bibliography of the subject. At the present time there is no other treatise on the subjects discussed so fully up to the period. In a

subsequent edition we hope to find some minor blemishes corrected, so that its real merit may be more palpable.

A Treatise on the Theory and Practice of Obstetrics. By WM. H. BYFORD, A.M., M.D., Professor of Obstetrics and Diseases of Women and Children in the Chicago Medical College, etc., etc. Second edition; thoroughly revised. New York: Wm. Wood & Co., 27 Great Jones Street. 1873. 8vo. Pp. 469. Illustrated.

On the appearance of the first edition of this treatise, we spoke of its general merits in commendatory terms, and foretold its probable popularity. The speedy exhaustion of that edition, and the appearance of the present volume so soon, prove our words correct. Our eminent townsman may well be gratified at the success achieved. Some of our readers are aware of a sharp attack made upon the work by a "hot-livered grammarian," in an eastern magazine, and it is to be confessed the signs of haste in preparation (as must almost of necessity be the case when so busy a man as Prof. Byford writes) were abundantly obvious in that edition. But in the volume before us these blemishes have disappeared, and it can safely challenge the trivial verbal reprobation of the eastern critic. Of its claims as a work of reference and standard authority there can be no room for doubt.

Santo Domingo, Past and Present: With a Glance at Hayti. By SAMUEL HAZARD, Author of Cuba with Pen and Pencil. Maps and Numerous Illustrations. New York: Harper & Brothers, Publishers, Franklin Square. 1873.

Mr. Hazard visited the island at the same time with the United States Commission. His description is given in an easy reportorial style, which makes reading also easy. Perusal of it at odd hours, in the terribly cold days of the last month, has almost converted us to annexationists. The variety and perfection of climate embraced in the small space of this one island ought to make it exceedingly valuable as a general sanitarium for physical invalids, as well as the political ones who seek its possession.

PAMPHLETS, ETC.

The Half-Yearly Abstract of the Medical Sciences. Being a Digest of British and Continental Medicine, and of the Progress of Medicine and the Collateral Sciences. Edited by WILLIAM DOMETT STONE, M.D., F.R.C.S. (Exam.) Vol. LVI, January, 1873. Philadelphia: Henry C. Lea. 1873. \$2.50 per annum, in advance. Single volumes, \$1.50. Pp. 296.

Half-Yearly Compendium of Medical Science. Part XI. Philadelphia: S. W. Butler & Co., 115 South Seventeenth Street. Pp. 280. \$3.00 per annum. Single numbers, \$2.00. For the first ten numbers, \$12.00.

Report of the Pennsylvania Hospital for the Insane, for the Year 1872. By THOMAS S. KIRKBRIDE, M.D., Physician and Chief Superintendent. Published by order of the Board of Managers. Philadelphia: 1873.

Free Parks and Camping Grounds: Or, Sanitariums for the Sick and Debilitated Children of Large Cities during the Summer Months. By J. M. TONER, M.D., Washington, D. C.

Infant Mortality. By H. C. HAND, M.D., St. Paul, Minn., Ed. N. W. Medical and Surgical Journal.

The New Operation for Coloring Corneal Opacities. By R. J. LEVIS, M.D., Surgeon to the Pennsylvania Hospital, and to the Wills Ophthalmic Hospital.

The Cell. (Reprinted from "The Lens.") Pp. 16. By I. N. DANFORTH, M.D., Pathologist to St. Luke's Hospital, etc.

Ryan's Philosophy of Marriage. In its Social, Moral and Physical Relations; with an Account of the Diseases of the Genito-Urinary Organs, etc. By MICHAEL RYAN, M.D., Member of the Royal College of Physicians. 12mo. \$1.00.

Walker on Intermarriage. Or the Mode in which, and the Causes why, Beauty, Health and Intellect result from certain Unions, and Deformity, Disease and Insanity from others. With Illustrations. By ALEXANDER WALKER, Author of "Woman," "Beauty," etc., etc. 12mo. \$1.50.

A Report to the Board of Health of the City of Chicago. On the necessity of an extension of the sewerage of the city. By JOHN H. RAUCH, M.D., Sanitary Superintendent. Published by order of the Board, Chicago. 1873. Pp. 22.

City of Des Moines, Iowa. Business Opportunity and Desirable Location.

McKesson & Roberts' New York Prices Current, of Drugs, Druggists' Articles, Chemical and Pharmaceutical Preparations, Proprietary Medicines and Perfumery, Sponges, Corks, Dyes, Paints, etc., etc. Pp. 160.

An elaborately and elegantly gotten up catalogue, profusely illustrated, and from the beautiful vignette serving as frontispiece, sent out by a fine looking quartette of gentlemen. The fifth partner probably has not yet earned his spurs.

Editorial.

A New Journal.

We welcome to our exchange list *THE SANITARIAN*: a Monthly Journal. A. N. BELL, M.D., Editor. Published by A. S. Barnes & Company, New York and Chicago. Pp. 48. Thirty cents single copy—\$3 a year in advance. The object in chief of the *SANITARIAN* will be to awaken public attention to the extent of the field of sanitary science and indicate how beneficently it may be cultivated. The Prospectus remarks:

"This will be done by showing the amount of ill health and mortality from preventable causes of disease; by pointing out the nature of those causes, and the way in which they operate; by showing that such causes are removable; and by exhibiting improved health, longevity and happiness as the fruits of their removal.

"The laws of physiology and general pathology will be kept in view, as the basis of health; and by which hygiene constitutes a department of science which the medical profession can advantageously share with the public, or apply to individuals according to circumstances. The detail of these relations will involve questions of manifold significance, and many of them of the utmost importance to human health.

"The practical questions of State Medicine: the health of armies and navies, marine hygiene, quarantine, civic cleanliness, water supply, drainage and sewerage. Sanitary architecture: light, space, warming and ventilation. Climate and domicile: epidemic, endemic and hereditary diseases. Occupation: exercise and habits, food and beverages, in all varieties of quality and quantity. In short, whatever thing, condition or circumstance is in rapport with, or antagonistic to, the most perfect culture of mind and body will be considered legitimate matter for the *SANITARIAN* to discuss, advocate, condemn or reject at the bar of health."

Among the indorsers of the Editor, and his object, we find such well known names as Drs. Stephen Smith, S. O. Vanderpoel (Health Officer, Port of New York), Willard Parker, S. G. Armor, Wm. A. Hammond, J. Ordronaux, A. Flint, Jr., etc., etc.

It is unnecessary for us to remark that the most of the existing journals ostensibly devoted to hygiene and sanitary movements, are in fact travesties. Their main idea seems to be to tickle the public fancy, with crude mixtures of stale truths, and dogmas none the less offensive because "sent into this breathing world scarce half made up" rather than worm-eaten or fossilized. There are two classes in the public which such journals as the one before us may well enlighten—the one which trusts in everything, and beyond all due bounds, in medical men, and the other which is largely or altogether sceptical as to their value. There is vastly more in medical science (including sanitary science) than many believe, and there is vastly less than either professional or lay optimists have a notion.

Hygiene and Materia Medica.

In a recently published note, the eminent surgeon and teacher, Willard Parker, M.D., uses these words:

"Heretofore, *materia medica* has almost monopolized the attention in our schools of medicine, as if that were the all important agent in the cure of disease."

Against which proposition we earnestly protest as doing gross injustice to many, if not the majority, of the schools. The attention of Prof. Parker to the duties of his extensive practice, and those of his particular department of teaching, has probably prevented his notice of the fact that for a long time, *PHYSIOLOGY* and its necessary inferential teachings, have taken the leading position in the colleges. Educated medical men, for years, have been investigating the relations of facts, and seeking the laws. Mere medicine seekers and givers have fallen into something like contempt—not for the paltry reason suggested by Professor Parker in these words:

"During the last forty years a form of practice has been introduced which has demonstrated the little value of *medicine alone*, and the public are now demanding more knowledge upon the laws of life and health."

Theoretically and practically, Homœopathy deals constantly and largely in medicine giving. They have specifics for every ill that flesh is heir to, and their *public* believe homœopathic medicines are really "potencies." Neither the "public" nor the profession are under obligations to Homœopathy for their greater concern about sanitary laws.

Medical science advances, and included sanitary science advances, because its study is more and more approximating the methods whereby other sciences are advanced. The *asinus portaus mysteria*, whether ridden by Galen or Hahnemann, has been sent to the rear, even of the baggage-wagons, of the grand army of progress.

The notion of the entity of disease still infects some minds, leading them to hunt for new specifics and panaceas, but the thinking men, the inquiring men, the experimenting men, are wresting from Nature the secrets of Health and Disease, just as Huxley, Tyndall and Agassiz are seizing the grand truths of physical science.

It is sincerely to be hoped that Prof. Parker and those who entertain similar opinions may look over the facts a little more closely, before affording any more such "hasty plates of soup" for the delectation of the infinitesimal crew.

NOTICES.

American Medical Association.

OFFICE OF PERMANENT SECRETARY, }
1400 Pine Street, S. W. cor. Broad, Philadelphia. }

The Twenty-Fourth Annual Session will be held in St. Louis, Mo., May 6, 1873, at 11 A. M.

The following committees are expected to report :

On Cultivation of the Cinchona Tree. Dr. Lemuel J. Deal, Philadelphia, Pa., Chairman.

On Measures to Prevent the Extension of Diseases of Inferior Animals to Man, and the Sanitary Measures to Arrest the Progress of such Diseases in Animals. Dr. A. W. Stein, New York, N. Y., Chairman.

On the Treatment of Fractures. Dr. Lewis A. Sayre, New York, N. Y., Chairman.

On Gunguillia as a Substitute for Quinia. Dr. Wm. Chew Van Bibber, Baltimore, Md., Chairman.

On Gynæcology. Dr. Montrose A. Pallen, St. Louis, Mo., Chairman.

On the Renewal of Prescriptions without Authority, and on the Relations of Physicians and Druggists. Dr. R. J. O'Sullivan, New York, N. Y., Chairman.

On Vaccination. Dr. T. N. Wise, Covington, Ky., Chairman.

On Skin Transplantation. Dr. J. Ford Thompson, Washington, D. C., Chairman.

On some Diseases peculiar to Colorado. Dr. John Elsner, Denver, Col., Chairman.

On Correspondence with State Medical Societies. Dr. N. S. Davis, Chicago, Ill., Chairman.

On National Health Council. Dr. Thomas M. Logan, Sacramento, Cal., Chairman.

On Nomenclature of Diseases. Dr. Francis Gurney Smith, Philadelphia, Pa., Chairman.

On American Medical Necrology. Dr. J. D. Jackson, Danville, Kentucky, Chairman.

On Suggestions on Medical Education. Dr. A. M. Pollock, Pittsburgh, Pa., Chairman.

On Medical Education. Dr. William Carson, Cincinnati, Ohio, Chairman.

On Medical Literature. Dr. Austin Flint, New York, N. Y., Chairman.

On Prize Essays. Dr. John S. Moore, St. Louis, Mo., Chairman.

On Plan for better Arrangement of Sections, and more Rigid Examination of Papers offered for Publication. Dr. E. L. Howard, Baltimore, Md., Chairman.

On Ethics. Dr. H. F. Askew, Wilmington, Del., Chairman.

On the Climatology and Epidemics of—

Alabama, Dr. T. C. Osborne ; Arkansas, Dr. G. W. Lawrence ; California, Dr. W. H. Williams ; Colorado, Dr. R. G. Buckingham ; Connecticut, Dr. J. C. Jackson ; Delaware, Dr. L. P. Bush ; District of Columbia, Dr. J. W. H. Lovejoy ; Georgia, Dr. G. M. McDowell ; Illinois, Dr. David Prince ; Indiana, Dr. Dugan Clark ; Iowa, Dr. G. M. Staples ; Kansas, Dr. Tiffin Sinks ; Kentucky, Dr. L. P. Yandell, Sr. ; Louisiana, Dr. S. M. Bemiss ; Maine, Dr. S. H. Tewksbury ; Maryland, Dr. C. H. Ohr ; Massachusetts, Dr. E. Cutter ; Michigan, Dr. S. H. Douglass ; Minnesota, Dr. Charles N. Hewitt ; Mississippi, Dr. S. V. D. Hill ; Missouri, Dr. T. B. Lester ; New Hampshire, Dr. G. A. Crosby ; New Jersey, Dr. E. M. Hunt ; New York, Dr. Gouverneur M. Smith ; North Carolina, Dr. E. Burke Haywood ; Ohio, Dr. J. A. Murphy ; Oregon, Dr. Horace Carpenter ; Pennsylvania, Dr. W. L. Wells ; Rhode Island, Dr. Edward T. Caswell ; South Carolina, Dr. M. Simmons ; Tennessee, Dr. W. K. Bowling ; Texas, Dr. S. M. Welch ; Vermont, Dr. G. B. Bullard ; Virginia, Dr. H. A. Claiborne ; West Virginia, Dr. H. W. Brock ; Wisconsin, Dr. J. K. Bartlett.

Physicians desiring to present papers before the Association should observe the following rule:

"Papers appropriate to the several sections, in order to secure consideration and action, must be sent to the Secretary of the appropriate section at least one month before the meeting which is to act upon them. It shall be the duty of the Secretary to whom such papers are sent, to examine them with care, and, with the advice of the Chairman of his section, to determine the time and order of their presentation, and give due notice of the same."

OFFICERS OF SECTIONS.

Chemistry and Materia Medica.—Drs. R. E. Rogers, Philadelphia, Pa., Chairman; Ephraim Cutter, Boston, Mass., Sec.

Practice of Medicine and Obstetrics.—Drs. D. A. O'Donnell, Baltimore, Md., Chairman; Benjamin F. Dawson, New York, N. Y., Sec.

Surgery and Anatomy.—Drs. Edward Warren, Baltimore, Md., Chairman; W. F. Peck, Davenport, Iowa, Sec.

Meteorology and Epidemics.—Drs. George Sutton, Aurora, Indiana, Chairman; Elisha Harris, New York, N. Y., Sec.

Medical Jurisprudence, Hygiene and Physiology.—Drs. S. C. Busey, Washington, D. C., Chairman; A. B. Arnold, Baltimore, M.D., Sec.

Psychology.—Drs. Isaac Ray, Philadelphia, Pa., Chairman; John Curwen, Harrisburg, Pa., Sec.

AMENDMENTS TO BE ACTED ON.

(TO CONSTITUTION.)

Resolved, That the United States Marine Hospital Service be placed in the same relative position in the American Medical Association as the Medical Department of the United States Army and Navy.

And that in paragraph 2, of the 2nd section, after the words "army and navy," the words "and the United States Marine Hospital Service" be inserted.

(TO BY-LAWS.)

SEC. III.—*Standing Committees.*

That, instead of a report on Medical Education, Medical Literature, and Climatology and Epidemic Diseases, there shall be annually delivered before the Association, at its general meetings, an address in medicine, an address in surgery, and an address in midwifery, or the diseases of children, the lecturers to be appointed this year by the President; afterwards by the Committee on Nominations.

Also, in section 6, after the words, "the chiefs of the bureaus of the army and navy," be inserted "and the supervising surgeon of the United States Marine Hospital Service."

Secretaries of all medical organizations are requested to forward lists of their delegates, as soon as elected, to the Permanent Secretary.

WM. B. ATKINSON, M.D., Permanent Secretary.

No. 1400 Pine Street, Philadelphia.

We cheerfully call attention to the following circular :

Medical Register and Directory of the United States.


Work on this important publication, which was delayed by illness, is now resumed with energy, and it will be issued as soon as the vast amount of material can be collected and arranged. The *Register and Directory* will contain as complete a list of the medical men in the United States, with their professional status, as can be obtained by personal application to each, and from other sources.

Also, a complete medical history of each State, including all its medical institutions, societies, etc., and all medical legislation. Nothing will be omitted that will be of possible benefit to the profession. The co-operation of medical men in every section of the country is earnestly solicited in replying to the circulars sent out, and in *giving brief outlines of the history of medical institutions, hospitals, colleges, etc., and of State, and the more important local medical organizations.*

Circulars will be sent out hereafter *by States*, and announced through the medical journals. They *have been sent* to the following States and Territories, viz.: Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Dakotah, Delaware, District of Columbia, Florida, and Georgia. In *March*, they will be sent to Illinois, Indiana, Iowa, Kansas, Kentucky, and Louisiana, and all the remaining territories.

IMMEDIATE ANSWERS are requested, and prompt notification if circulars are not received.

Physicians are particularly requested to make as full replies as possible to the questions in the circular.

 Medical Journals please notice.

S. W. BUTLER, M.D., 115 S. Seventh St., Philadelphia.

To American Publishers and Authors.

There are many American Books, Pamphlets, Maps, etc., so interesting, important, special and unique, and therefore so deserving of wide recognition, that there would undoubtedly be a considerable demand for them in foreign countries, if public attention were there properly directed to them.

This I believe I am in position to do, and thus open out, in a measure, the market *outside America* for *Original American Literature* by appending to my CATALOGUE OF AMERICAN PERIODICAL LITERATURE a list of *original American publications* (including translations, but *excluding all reprints*).

I should regard such Appendix simply as an experiment which could not be perfected on the first attempt. However, should the reception of this List abroad warrant it, I would, in a second edition, aim at greater completeness.

The value of such List of Books, etc., will be considerably enhanced by an *Index* in which the *subject-matter* of each will be found registered, so that on looking for any *special* subject one would be referred to the various publications treating of the same.

I desire especially to enumerate *original American publications* in the following departments :

American Antiquities, Bibliography, Biography, Education (exclusive of School Books,) Geography, History, Jurisprudence, Languages, Politics, Statistics, and other important matters specially *American*.

Theology (of all Schools and Sects), Philosophy, Medicine and Surgery, Natural History, Chemistry and Pharmacy, Natural Philosophy, Mathematics and Astronomy, Modern Languages and Philology, (exclusive of School Books), Architecture, Engineering, Manufactures, Mechanics, Military and Naval Science, Commerce and Finance, Rural and Domestic Economy, Fine Arts and Music, Secret Societies, Spiritualism, Atlases, Maps and Charts, Views of American Scenery.

Publishers or authors desirous of having their publications inserted in my Catalogue, and in the Index, will please apply to me for the requisite number of blank forms, which must be carefully filled up, and returned to me without delay.

E. STEIGER.

New York, 1873, Feb. 5th.

Appeal of the Philadelphia Obstetrical Society for Aid in the Formation of a Museum of Distorted Pelves, Obstetrical and Gynecological Instruments.

At a recent meeting of the Philadelphia Obstetrical Society, it was decided to establish a Museum, for the collection of deformed and distorted Pelves, and for the preservation of Obstetrical Instruments possessing historical value, or illustrating new methods of treatment.

The Society was led to take this action for these reasons :

1st. No subject at present possesses more interest to the obstetrician than the study of the various deformities of the Pelvis, their mode of production, their influence on the process of parturition, and the principles which should guide the accoucheur when operative interference is deemed necessary.

The Profession is gradually becoming more and more convinced of the influence of contractions, more or less marked, in causing not only tedious and difficult labors, but also in the production of mal-presentations and of many of the accidents of labor.

At present there does not exist any extensive collection of Female Pelves, by which a comprehensive study of this subject can be successfully undertaken. Feeling, therefore, the importance of such observation, the Society proposes to establish a MUSEUM, having this object in view, and would therefore earnestly solicit such specimens of contracted Pelves as may be in the possession of members of the Medical Profession, who may be willing to yield the pleasure of individual possession, in order to assist in forming a collection which will allow a wider and more comprehensive survey of this subject. If the original specimen cannot be sent, casts or photographs are solicited. In certain cases, possessing unusual interest, the Society is prepared to offer a pecuniary recompense, should this be desired.

2nd. Recognizing the fact, that various Instruments, designed for Obstetric Manipulations, or for the performance of operations in Uterine Surgery, having been superseded by new and improved models, now possess only an historical

interest, the Society has determined to collect such instruments and preserve them, as illustrating the progress of this branch of our art in America. We would also warmly urge upon the inventors of new or modified instruments, and upon Surgical Instrument Makers in general, the desirability of presenting to the Society specimens of Instruments, Pessaries, and special mechanical contrivances, which they may be desirous of bringing before the Profession.

All objects, whether embraced in the first or second class, will be conspicuously placed in the Museum of the Society, after having been labeled with an explanatory description, and with the name of the donor.

They will also be carefully preserved, open to the inspection of all interested in the support and advancement of Obstetrics and the kindred branches of Medicine.

All objects for the Museum may be sent to the Secretary of the Society, Dr. J. V. INGHAM, No. 1342 Spruce Street, Philadelphia, who will at once acknowledge their receipt, and will gladly furnish such additional information as may be desired.

By order of the Society. WM. GOODELL, M.D., President.

WM. F. JENKS, M.D.,	} Committee.
J. V. INGHAM, M.D.,	
HORACE WILLIAMS, M.D.,	

OBITUARY.

DR. WILLIAM HENRY PALMER, the subject of this memoir, was born in Morgan County, Illinois, December 24th, 1849, and died of small-pox, at Leroy, Ill., March 5th, 1873.

Dr. Palmer leaves a mother and five brothers to mourn his loss. The oldest of his brothers is Gen. Joseph B. Palmer, of Murfreesboro', Tenn., whose name was before the constitutional convention of his district for Congressional honors, but withdrawn in favor of John M. Bright, the present incumbent.

In 1868, Dr. Palmer selected medicine as his profession and entered upon his studies with Dr. R. E. McVey, at Waverly, Ill., where he remained two years in close application to study, giving especial attention to the study of anatomy. Dr. Palmer's genial disposition and insinuating manner made him socially more attractive, and secured for him the universal respect of all with whom he associated, and the love of his intimate friends. He was, indeed, a young man of true merit and of unblemished character.

He was a member of the M. E. Church at Waverly, Ill., and was noted for his devotion to the interests of christianity and the church.

In the fall of 1869-70 he attended his first course of lectures in Rush Medical College. On account of the great fire he was prevented from completing his course of studies in the College until 1873. Few men ever give promise of a more useful and honorable life than did Dr. Palmer. *Requiescat in pace.*

R. E. McVEY.

Waverly, Ill., March 25, 1873.